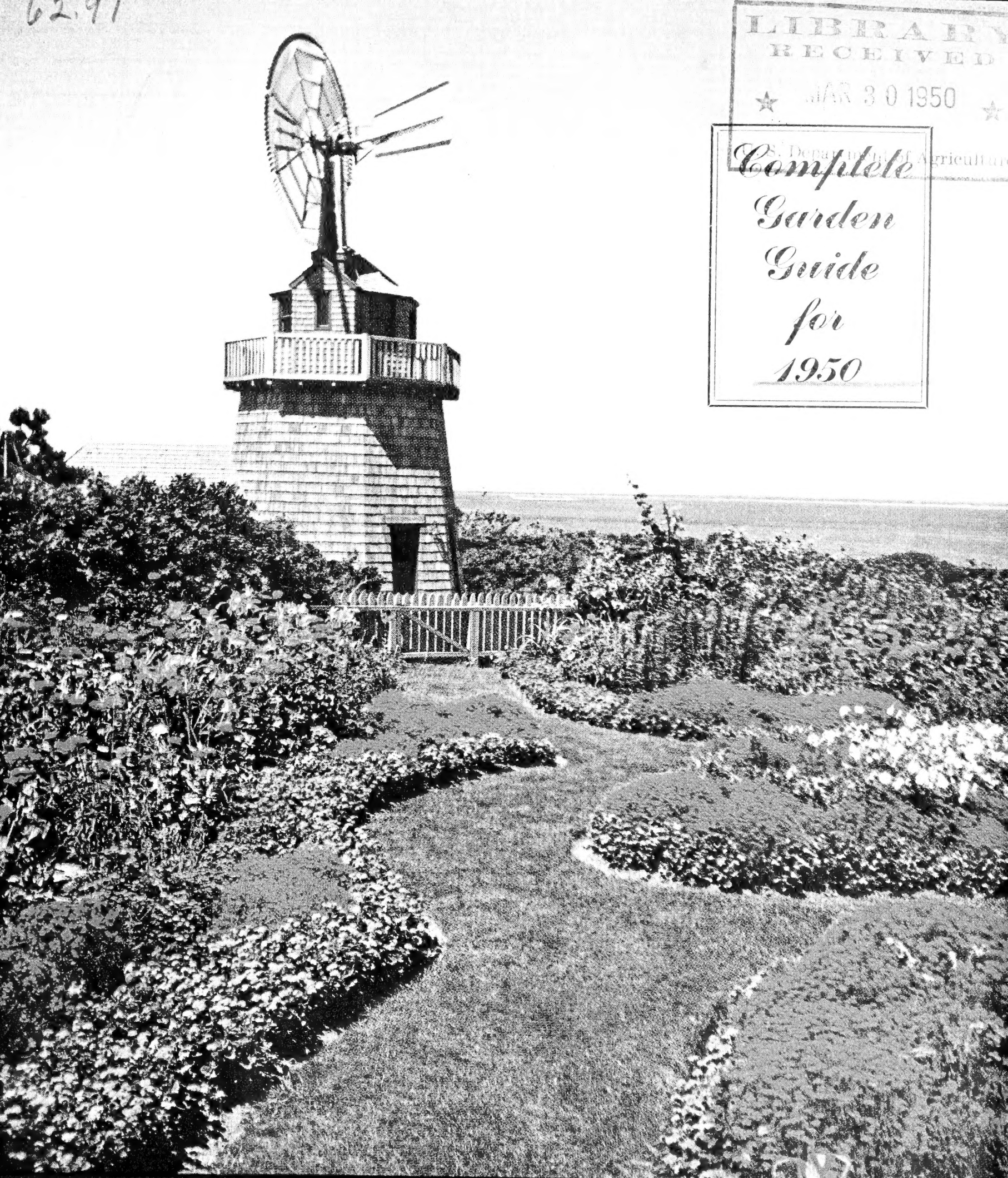


## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





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★ MAR 30 1950 ★

U.S. Department of Agriculture

*Complete  
Garden  
Guide  
for  
1950*

# SEATTLE SEED'S *Garden Annual*

SEATTLE SEED COMPANY  
1514 Second Ave.

• SEATTLE 1, WASH.  
Telephone SEneca 2338



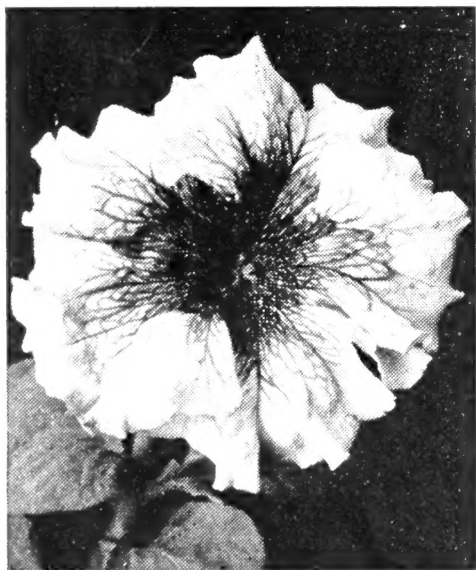
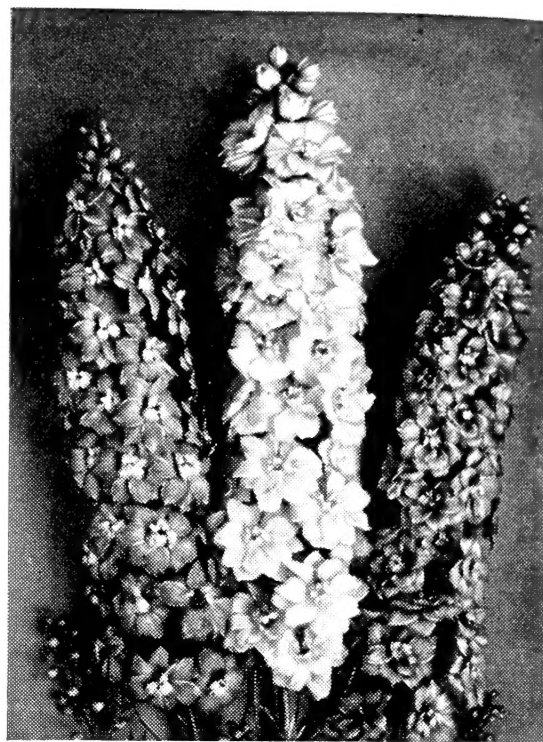
**New! THE GREATEST FLOWER  
NEWS IN MORE THAN A DECADE**



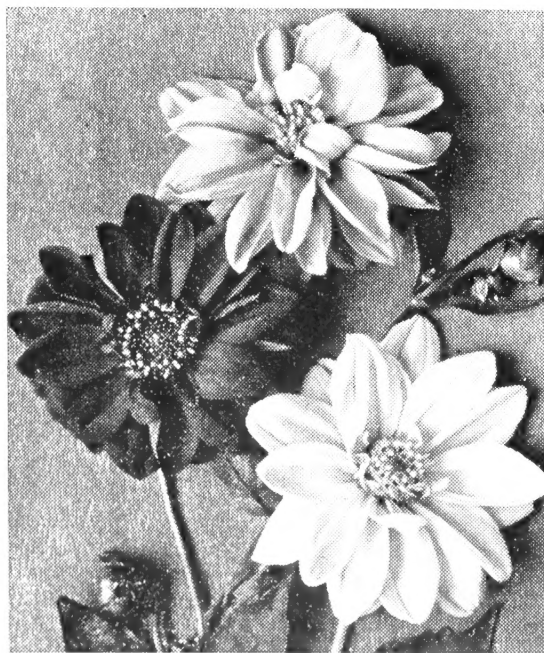
**FIRE CHIEF PETUNIA**—This beautiful deep red petunia is the first flower to win the top Gold Medal award in eleven years! Plan to be one of the first to use this important new variety. Will add a glowing new freshness to your flower garden. Pkt. 25c

**Our Feature  
Selections  
FOR YOUR GARDEN**

(Right), **DELPHINIUM, Pacific Giant Hybrids**. The outstanding new strain produces large, dense spikes of exquisite, double flowers on strong, tall stems. 25c.

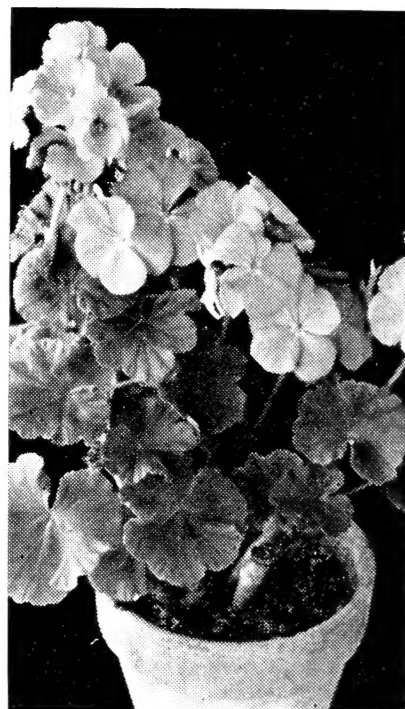
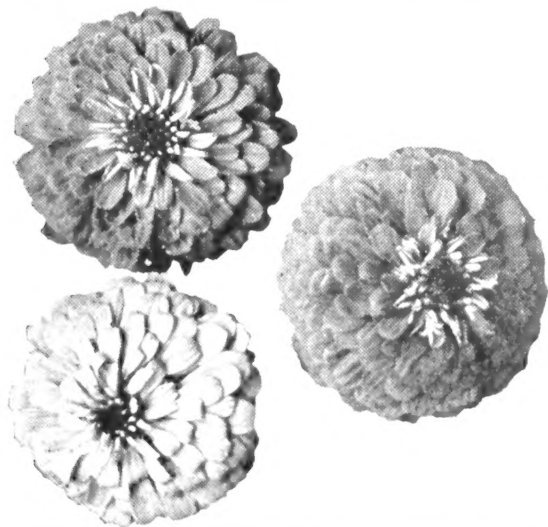


(Above), **PETUNIA, Giants of California**. The largest flowers among Petunias, heavily ruffled with wide, shallow throats and rich markings. Grow in practically any type of soil under most conditions. Pkt. 25c.

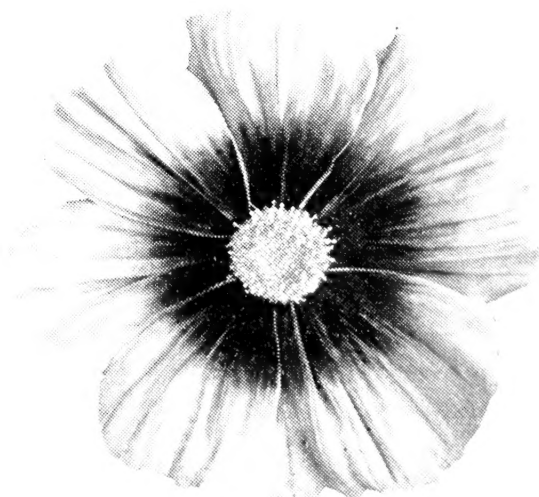


(Above), **DAHLIA, Unwin's Dwarf Hybrids**. An outstanding strain bearing lovely, semi-double flowers. Easily grown from seed and blossoms in about sixty days. Very effective in border and for cut flowers. Pkt. 25c.

(Left), **ZINNIA, Early Wonder Finest Mixed**. Earliest of all Zinnias, Flowers on very long stems which have no laterals and practically no leaves. Ideal cutting flower. By public acclaim the zinnia is the most popular annual flower in the world today. Pkt. 15c.



(Above), **GERANIUM, Zonale**. Easily grown from seed and will bloom the first year when started early. Large, single flowered form of this popular bedding and pot plant. Pkt. 25c.



(Above), **COSMOS, Radiance**. All America Award. Result of twelve years of perfecting. The central crimson zone is entirely new in Cosmos and identifies it like a signature. Grows well almost anywhere. Pkt. 25c.



# This book is a Complete Guide



Do you know exactly how much lettuce seed to plant for the number of feet of row you want?

... or what kind of soil you need for cucumbers? And how to get it?

... or what are the reasons behind inter-cropping, catch-cropping, and succession cropping?

... or the special fertilizer needs of dahlias?

• • •

In this "Garden Annual" you'll find the answers to hundreds of questions like these! Unlike most seed catalogs, this book devotes nearly half its space to the "How-when-where-why" of gardening.

You see, we want your garden to be a rousing success! We want you to get the most results with the least effort. We want your gardening to be fun.

So, in this book as in our store, we do everything possible to help the gardeners we serve.

Our job as seedsmen, we believe, is to provide know-how, as well as merchandise. We provide it through our Spring Garden Annuals. We keep on providing it in our store, throughout the year!

## YEAR-ROUND!

We offer a complete, year-round, local garden service.

We offer only good, fresh seeds—packet or bulk.

We offer a complete supply service.

We offer cheerful, expert garden counsel.

## HELLO NEIGHBOR!



## Just between us home folks—

As you've already noticed, this "Garden Annual" comes to you from a neighbor. Unlike most seed catalogs, it's a local affair. That's very important, we think.

For one thing, it means that this book tells about local gardening—and offers you seeds and garden materials suited to your own area and your own growing conditions. It means, also, that you don't have to send a thousand miles away to get what you want for your garden. You can get the very best, right here in your own neighborhood!

• • •

Another very important point—as you know, there are many flower and vegetable seed varieties which do well in some areas, but are uncertain in other parts of the country. So we always make sure the seed we offer is truly suitable for use hereabouts. Often we rule out very attractive varieties, because we want your garden to be successful, from start to finish!

Isn't it just good sense, then, to do your garden shopping here—where your needs are understood! Certainly it's easier—and safer!

**PRICES:** All prices in this catalog are subject to change without notice.

**MAIL ORDERS:** On mail orders, all packet seeds are sent postpaid. On all other items, add parcel post charges to your remittance.

**Limited Warranty Clause**—Our Company warrants to the extent of the purchase price that seeds or bulbs sold are as described on the container within recognized tolerances. Seller gives no other or further Warranty, express or implied.

**NOTE**—If any of your gardening friends have not received this catalog, and would like to have a copy, just let us know. But please do so early, as the supply is limited. And, incidentally, if you, yourself, have any comments to make on our book (good or bad) we hope you'll let us have them—in person or by letter. We like a pat on the back—and we appreciate constructive criticism, too.



# How to Grow and Maintain a Beautiful, Rich, Green Lawn!

## Spring Lawn Care

Early spring care is necessary if you want a really good lawn. Here is the proper procedure for spring lawn care.

**RAKE THE LAWN**—Remove all of the debris that accumulated on the lawn during the winter. This eliminates any danger of interference with new growth of grass.

**APPLY A COMPLETE, BALANCED PLANT FOOD**—As soon as raking has been completed, apply plant food as directed by manufacturer. If grass has started to grow, be sure to make application when it is dry, then soak the lawn to wash plant food off the grass blades and into the soil.

**RESEED THIN AND BARE SPOTS**—Use from three to five pounds of good grade grass seed per 1000 square feet. Pulverize the soil in bare spots, and in seeding, use twice as much seed as used on thin turf. Cover seed lightly with top soil to protect it and give it a chance to germinate.

**ROLL THE LAWN**—This operation brings the grass roots into firm contact with the soil so that growth can go on at its best. Clay soils require less rolling than others and should be rolled with a light weight roller. Do not roll the lawn when the soil is wet. Ground should be reasonably dry to avoid too much packing.

This work should be completed early in Spring. It is then that moisture conditions and temperatures are most favorable to the growth of grass.

## Summer Lawn Care

During the summer, your lawn requires care for best results.

**MOWING**—Mow frequently but not too close. Set mower to cut about two inches high. Very close cutting, unless done extra-frequently, will injure the grass by sudden exposure to the sun after it has been shaded by dense growth. Mower clippings left on the lawn are beneficial, unless in sufficient quantity to smother the grass.

**WATERING**—A watering program cannot be set down by the calendar but must depend on your judgment. Make sure the lawn actually needs watering, then give it a thorough soaking so that the water penetrates to a depth of six to eight inches. Never sprinkle lightly. This does more harm than good for it tends to make the grass roots come too close to the surface in an effort to reach moisture.

**WEED CONTROL**—The many excellent selective weed controls on the market today make weed control simple and sure. Watch for the appearance of weeds in your lawn and eliminate them immediately.

**SEEDING**—While early spring and early fall seedings are the most productive, don't hesitate to plant in midsummer.

Keep after those thin and bare spots. When you seed in summer, take particular care with watering and weeding.

## Fall Lawn Care

About the time fall rolls around interest in the lawn may be waning just a bit, but another feeding with a complete, balanced plant food and another seeding of bare and thin spots at this time will produce marvelous results next spring and summer.

### FALL IS A GOOD TIME TO MAKE A NEW LAWN

During the moderate fall weather, grass seed germinates quickly and makes vigorous growth. Also, few weeds germinate in the fall, thus permitting the lawn to establish itself without interference.

Follow these six steps in making a new lawn:

1. Spade or plow the area to a depth of six or eight inches. Pulverize the soil thoroughly.
2. Apply a complete, balanced plant food as prescribed by the manufacturer.
3. Work the plant food into the top few inches of soil.
4. Sow a good grade of grass seed at the rate of four to five pounds per 1000 square feet. To secure even distribution, apply one-half of the seed crosswise, the other half lengthwise.
5. Roll the seeded area to imbed the seed in the soil.
6. Water thoroughly, using a fine spray. Keep moist by daily sprinklings until grass is established. Then soak to a depth of five or six inches once or twice a week.



# DEPENDABLE LAWN SEEDS for the Northwest

## Astoria Bent

Produces numerous root stocks which spread underground and throw up new shoots, making a very thick turf. This Bent has a good color and is excellent for lawns and putting greens. Does not require as much cutting as Creeping Bent.

## Olympic Colonial Bent

A Lilly's introduction that we believe is the finest bent grass we can offer. Makes a beautiful, fine-leaved, even turf. Requires less moisture because of its deeper rooting system. Will work well in mixture with Creeping Fescue, Chewings Fescue and Kentucky Blue Grass.

## Seaside Bent

A true creeping Bent. The plant is dwarf, and multiplies rapidly by sending out runners in all directions. With proper watering and care, it makes a strong, enduring turf. If damaged it heals over promptly.

## Kentucky Blue Grass

21 pounds per bushel. Produces a deep, dark-green lawn of close, thick turf. Maintains its green color until late fall. Roots are deep, and plants are very hardy. Makes one of the best lawns.

## Lilly's Best Kentucky Blue Grass

28 to 30 pounds per bushel. Lilly's has taken 21 pound Blue Grass and carefully cleaned out all chaff, large seed and inert matter to where the seed will weigh more to the bushel. The most seed for your money in Blue Grass.

## Chewings Fescue

A superb grass to grow in rather shaded areas and even on fairly acid soil and under other unfavorable conditions. Plants grow low, make a dense turf. Often used for putting greens and fairways.

## Red Creeping Fescue

Rapidly becoming the most popular of the fescues for lawns and general field use. This seed is Northwest grown and therefore has much better germination than the imported fescues. Has a very good ability to resist fungus growth. Develops a finer texture and makes an excellent turf.

## Lilly's Best White Dutch Clover

Although not a grass, White Clover is very desirable in lawn mixtures because of its rapid, low growth and creeping stems. Valuable as a green cover for poor ground. Succeeds best on moist ground or during wet season.

## Domestic Rye Grass

A quick-growing annual, valuable in lawn mixtures as a nurse crop, to keep lawn green while better, slow-growing varieties are becoming established. Succeeds well on almost any soil.

## Perennial Rye Grass

A quick growing grass, most suitable for mixtures. Succeeds well on almost any soil not water logged.

## Red Top

Particularly suitable for wet, low spots, as it stands wet weather, or even overflowing, better than other grasses. Also does well on almost any good, rich soil. Often thrives where blue grass fails—and therefore makes an excellent supplement for it.

## Other Grasses

Besides the lawn grasses listed here, we can also supply just about any other grasses you may need. We carry a complete line of all varieties that can be successfully grown in this part of the country. Just tell us what you want!

Your Lawn Can Only Be As Good As The Seed You Sow!

## PLANT THE BEST

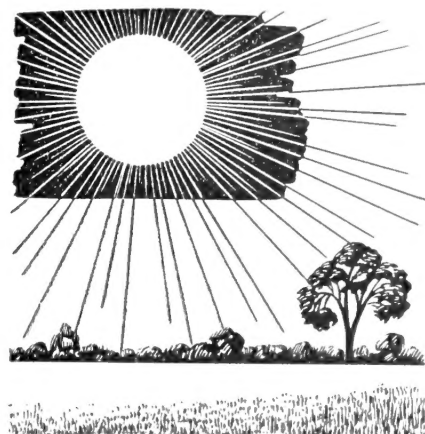
Especially blended for Pacific Northwest climate and soils. A balanced blend of only fine leaved grasses, chosen to give staggered dormancy, long-lasting, velvet green beauty.

# CREBENT

*Lawn Seed*



## WHATEVER THE NEED!



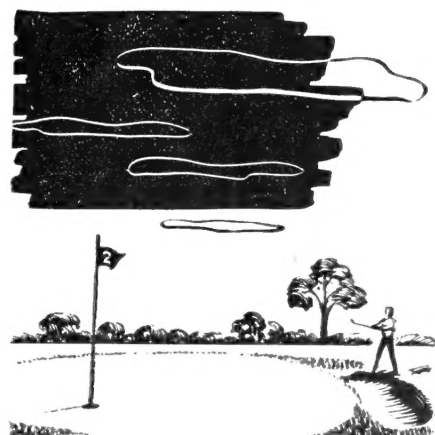
### BRIGHT SUN

Some sunny lawns require one type of seed; some need another. No single variety or mixture of varieties can take care of all situations. But whatever the need, we can supply the seed that is best suited.



### DEEP SHADE

Wherever cool shade makes it difficult to obtain a good lawn, our special shade mixture is heartily recommended. We have chosen excellent quality, shade enduring grasses and clovers that will give you good results.



### SPECIAL USES

We have just the right grass seed for every purpose. We can give you special deep-rooted grasses for the sloping lawn, the ideal grasses for planting on golf courses, parks, estates, cemeteries . . . or for just any other special use. Just tell us what you want.



# OUTSTANDING VEGETABLE VARIETIES

especially recommended for your garden

## STOCKESCROSS HYBRID TOMATOES

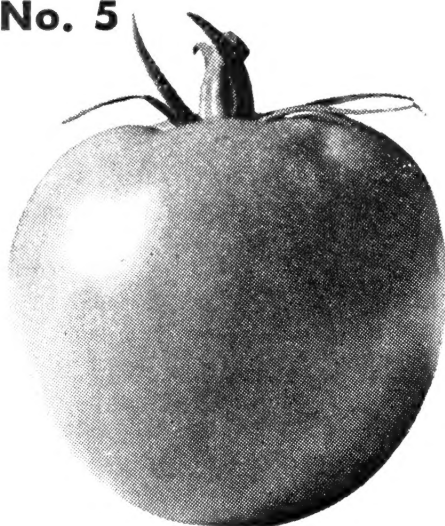
The newest, sensational development in vegetable seed for 1950. The best thing that has happened to the tomato for decades. This second generation hybrid is distinguished by its amazing vigor. Production increases up to 30% are not unusual.

A hand pollinated hybrid, it is the strongest cropping tomato ever introduced. It will mature within 75 days from transplanting, 10 days earlier than Rutgers, developing a continuing harvest of highly colored, rich flavored, 6 oz. fruit, that is nearly crack free. Highly profitable as a market tomato. We practically guarantee it will outproduce any tomato you have ever grown in the backyard garden or for commercial purposes. Pkt. 25c.

### STOKESCROSS NO. 2

Developed for those desiring a four ounce, crack free tomato of high color and flavor, maturing within 60 days of transplanting to the field. A tomato of high table quality and heavy production record. Pkt. 25c.

No. 5

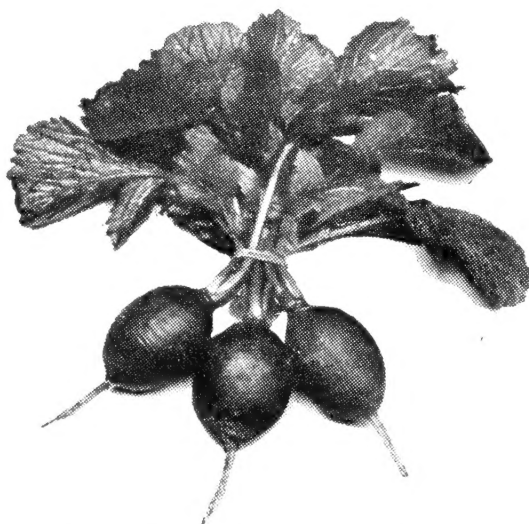


## TOPCROP BEAN

All America Gold Medal Winner for 1950. 51 days. One of the outstanding horticultural introductions in recent years. Does well in the home garden, market garden and is excellent for commercial processing. 5½ to 6 inches long round medium light green pods. Pkt. 15c.

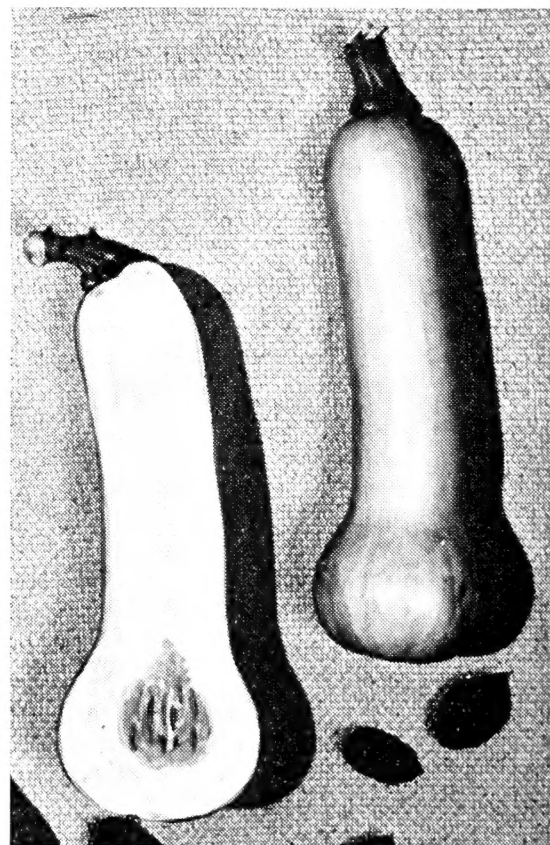
## FREEZONIAN PEA

All America Bronze Medal Winner of 1948. 63 Days. Luscious, melting peas that retain their garden fresh sweet flavor after freezing. The vigorous two and a half feet wilt resistant vines bear an excellent crop of 3½ inch pods well packed with 8 or 9 medium sized peas. Pkt. 15c.



## LILLY'S COMET RADISH

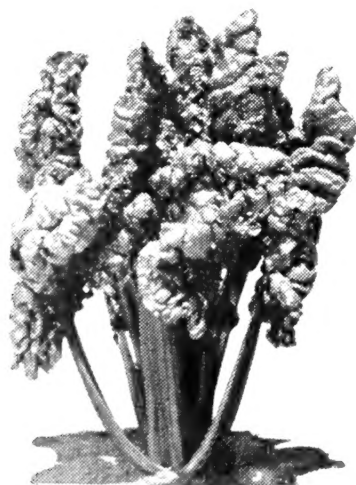
26 Days. Lilly's Comet is the result of years of selection by Lilly's field man, Mr. Gene Johnston, and has become a favorite with critical market garden trade since coming on the market a couple of years ago. It has an appetizing red color, globe to olive shape, with very little tap root. Stands crisp and tender a long time for an early variety. Pkt. 10c.



## SQUASH

**BUTTERNUT**—95 Days. The finest small Winter squash. Dry sweet yellow flesh of superb texture and excellent flavor, almost entirely clear, solid, high quality meat. Has an excellent flavor, almost entirely clear, solid, high quality meat. Has only a small seed cavity. Tasty baked or boiled. Easily grown, good keeping squash for the home garden. We recommend this new novelty to you unreservedly. Pkt. 15c.

**EARLY GOLDEN PROLIFIC STRAIGHT-NECK**—53 Days. A perfect market and home garden summer squash. Early, tender, delicious yellow squash with a straight neck. Its flavor, tenderness and bright yellow color makes it a favorite with the housewife. Pkt. 10c.



**RHUBARB CHARD**—60 Days. Excellent greens through most of the summer with little care. Cut and come again vegetable of delicious flavor. Identical in growing habits as Swiss Chard except the stalks have the color of Rhubarb, extending up through the veins onto the dark glossy green crumpled leaves. Showy as well as a useful plant for the garden. Very productive and of rapid growth. Pkt. 15c.

## PENNLAKE HEAD LETTUCE

Bronze Medal 1949 All America Winner

82 Days. A cross between Great Lakes and Imperial 847, producing fine heads, very uniform of dark green color and lack of ribbiness—measures high, very high in quality. Pkt. 15c.





## DEPENDABLE FARM SEEDS

### LILLY'S BEST COMMON ALFALFA—

Alfalfa fields are left for a long time when once established, so there seems to be no logical reason for using any other seed but the best. Lilly's Best brand of alfalfa is always better than 99% pure is free from dodder and other noxious weeds and consists only of big, plump seeds. All small and shrunken seeds have been removed. Lilly's Best Alfalfa is northern grown and is therefore more hardy and permanent than southern strains.

### GRIMM ALFALFA—

Its frost-resistance makes it valuable in the sections where severe winters prevail. Its yielding power of forage or hay is no greater than that of Common Alfalfa but it is desired for growing west of the Cascades because it has a spreading root system which withstands winter soil heaving.

### LADAK ALFALFA—

The hardest and heaviest cropping of the Grimm type alfalfas. Produces an extra-heavy first crop, and where moisture is abundant, a good second and third crop. Where moisture is lacking after the first cutting, it maintains itself until the following season.

### COSSACK ALFALFA—

Very similar to Grimm but thrives better on heavier soils. This is an exceptionally hardy alfalfa brought from Siberia. It is a heavy yielder as well as being cold and drought resistant.

### LADINO CLOVER—

Out produces all pasture clovers where moisture is plentiful. The use of this clover is growing by leaps and bounds. This is a pasture "must" where moisture is available or irrigation is used. Should be fed with grasses such as Rye-grass, Meadow Fescue or Alta Fescue as it has a tendency to bloat stock. This clover should not be pastured too close in the fall as it needs some protective growth to avoid frost injury during severe winters.

### LILLY'S BEST ALSIKE CLOVER—

Prefers a cool climate and will withstand severe winters. Likes a rather heavy silt or clay soil with abundant moisture. It is not so sensitive to acidity in soils as Red Clover and can therefore be successfully grown on many wet and "sour" soils on which Red Clover will not succeed. Remains in its prime for cutting for a long time and is especially adapted to use in mixture with grasses such as Timothy, Redtop, Perennial Ryegrass and Alta Fescue.

### LILLY'S BEST RED CLOVER—

The most important of all clovers. Adapted primarily to growing in rotation with other crops. Makes its best growth on rich, well-drained soil containing an abundance of lime and reasonably free of weeds. Produces both hay and seed crop the same season. The normal life of the plant is two years after which the stand deteriorates.

### SUBCLOVER—

Will produce big ton-nages of fine clover forage on light, hills soils where other clovers give

negligible results. Also does well on rich soils.

### CUMBERLAND AND MIDLAND RED CLOVER—

Better foilage, more disease resistance, more winter hardy and more drought resistant than the old common Red Clover. These are better strains of clover for the progressive farmer. They grow under the same conditions as common Red Clover.

### Inoculate with NODOGEN

Legume seeds must be inoculated for the best results. State and Federal Authorities urge it—for larger and more vigorous growth and for soil enrichment!

#### Alfalf & Sweet Clover

1 bu. size.....50c  
100 lbs. ....70c  
2½ bu. ....\$1.00

#### Red, Crimson, White Clovers, Alsike

1 bu. size ....50c  
100 lbs. ....70c  
2½ bu. ....\$1.00

#### Soybeans, All Varieties

2 bu. size ....30c  
5 bu. ....55c  
30 bu. ....\$3.00

#### Cowpeas and Peanuts

2 bu. size ....30c  
5 bu. ....55c  
30 bu. ....\$3.00

#### Field & Garden Beans

1 bu. size ....35c

#### Field & Garden Peas, Vetches

1 bu. size ....35c  
100 lbs. ....55c

#### Lupine, All Varieties

100 lb. size ...55c

#### Birdsfoot Trefoil

8 lb. Pkt. ....25c





**BIRDSFOOT TREFOIL**—(*Lotus Corniculatus*) and **BIG TREFOIL** (*Lotus Major*)—These two legumes are becoming increasingly popular. They both make fine hay and pasturage and are especially good in mixtures of grass.

**Birdsfoot Trefoil** has much wider adaptation of soil conditions (is even alkali tolerant) and will grow luxuriantly from rich bottom land to sandy hill land.

**Big Trefoil** has its best growth in low wet soils.

**LILLY'S BEST WHITE CLOVER**—An excellent plant for lawns and pastures and in some sections a valuable seed crop. For best growth, it requires a rather consistent supply of moisture and a fertile soil. The seed germinates quickly makes a fast start and has rapid recovery after cutting or pasturing. Thrives best on lands containing an abundance of lime.

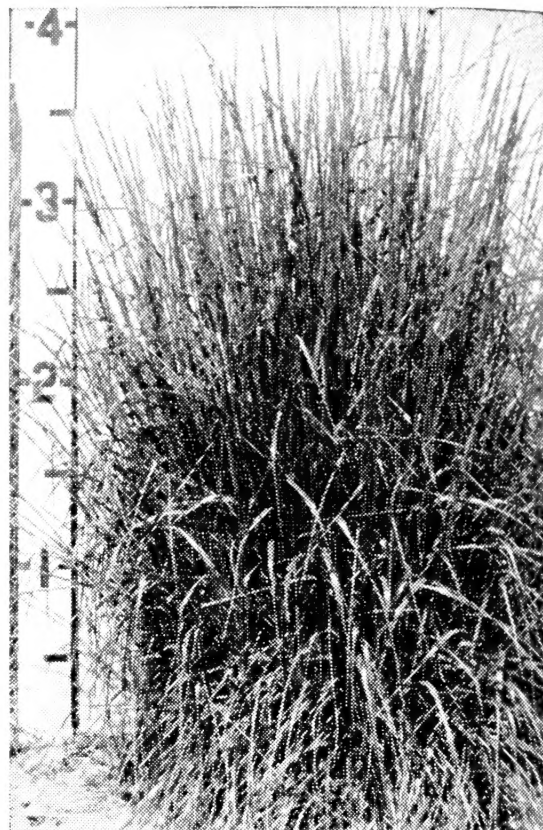
**WHITE SWEET CLOVER**—A strong, tap-rooted plant growing 4 to 6 feet in

height on practically all soils. Used principally as a pasture plant and for green manure.

**YELLOW SWEET CLOVER**—Similar in growing characteristics to White Sweet Clover but about two weeks earlier. Also shorter plants than White Sweet Clover therefore fits in better for orchard cover crops.

**YELLOW MADRID SWEET CLOVER**—A big improvement over the Yellow and White Sweet Clover. Produces finer foliage, heavier production and exceptionally deep roots makes this strain really outstanding.

**ALTA FESCUE**—Rated as the finest overall forage grass ever developed anywhere. Selected in Oregon by Dr. H. A. Schoth of the U. S. Department of Agriculture. Ideally adapted to a wide variety of conditions. Deep roots for late summer pasture. A genuine soil builder that even eradicates noxious weeds.



Alta Fescue

## Profitable pasture management BEGINS WITH "LILLY'S BEST" PERMANENT PASTURE MIXES

Lilly's scientists in agriculture have gathered data through hundreds of trial-ground tests of various experimental mixtures to give you TODAY'S "just-right" blend for greener pastures through the dry months and earlier growth to allow pasturing several weeks earlier in the spring. Available in "lowland" and "upland" mixtures. You'll find LILLY'S is the BEST Permanent Pasture Mix. Only the choicest lots of clovers and grasses are selected after rigid tests for purity and germination - assurance of uniform high quality and production.



Look for  
THE GREEN  
BAG!

**SMOOTH BROME GRASS**—A hardy, smooth, erect, drought-resisting, perennial grass. Forms an excellent sod for pasturage. Resistant to extreme cold and heat. A fine "upland" grass.

**MOUNTAIN BROME GRASS**—Similar to Smooth Brome Grass in every respect except that it grows more upright and is therefore better in hay mixtures.

**ORCHARD GRASS**—A long-lived perennial especially suited to rather rough lands or well-drained uplands. It makes a very good growth in the open and makes a better growth under shaded conditions than most other grasses. As a pasture grass produces a large quantity of forage. It should be cut for hay at the beginning of the bloom stage.

**TALL MEADOW OAT GRASS**—Of rapid, luxuriant growth. Matures exactly with Orchard Grass and Red Clover. Stands pasturing well, remaining green in the late fall. Thrives on both upland and well-drained bottoms.

**TUALATIN OATGRASS**—Another Dr. Schoth development. A big improvement over the old Tall Meadow Oat Grass. A wonderful forage producer. Unlike the old Oat Grass, this new strain has "de-awned" seeds that will work in mixtures and will pour readily through a seeder.

**TIMOTHY**—One of the most universally known and cultivated grasses especially adapted to cool, moist soils. The seed is usually low in price and of high germination making it a favorite with farmers. It is a standard grass for hay in all parts of the country.



**MEADOW FOXTAIL**—For moist, low ground. The very earliest grass in the spring. It will give an added two or three weeks pasturing. The grass is very succulent and well liked by stock. Works well with Ladino Clover on low, wet soils and irrigated land.

**SWEET SUDAN GRASS**—As the name indicates this is sweet and palatable to stock. Good for sowing in late May and June for quick hay and pasturage. Sweet Sudan produces about one-third more forage than Common Sudan.

**GRAY OR COMMON VETCH**—Adapted to either fall or spring planting on the Coast and to spring planting in the colder regions. Extensively grown as a seed crop. Splendid for green feed-

ing, silage or hay. Generally sown with grain which serves as a support.

**AUSTRIAN WINTER FIELD PEAS**—A fall sown seed grown in the Northwest primarily for seed. Is however very useful for all types of forage such as hay, silage and pasture. Makes an excellent cover crop for plowing under. A heavy producer.

**YELLOW CANADIAN FIELD PEAS**—Similar to Austrian Peas in all respects except they are spring sown.

**EARLY YELLOW CANADIAN FIELD PEAS**—About the same as the standard strain but two weeks earlier—makes hay and cover crops available more quickly. Heavy producer.



**LILLY'S FARM SEED PLANTING CHART**  
*Officially Approved*

CROPS	POUNDS OF SEED PER ACRE	PREFERRED TIME OF SEEDING		SOIL ADAPTATIONS
		WEST OF CASCADES	EAST OF CASCADES	
Listed alphabetically under the names most commonly used in the Northwest.	Seed-bed conditions and soil fertility influence the amount.	Safe Spring seeding dates for perennial grasses depend on the amount of moisture in the soil.	Lack of recommended dates indicates that the crop is not generally adapted to that region.	It is more profitable to suit the crop to the land than to change the land for the crop.
<b>ALFALFA</b>	general 12-15 dryland 8-12	Apr. 1 - June 1	Apr. 15 - June 1	Fertile, deep well drained loam
<b>BENT GRASSES</b>				
<b>ASTORIA &amp; DOMESTIC</b>	7-10	Sept. 1 - Nov. 1 Feb. 1 - Apr. 15		Moist, fertile, heavy soils
<b>HIGHLAND</b>	7-10	Sept. 1 - Nov. 1 Feb. 1 - Apr. 15		Widely adapted
<b>COLONIAL, RHODE ISLAND &amp; SEASIDE</b>	7-10	Sept. 1 - Nov. 1 Feb. 1 - Apr. 15		Moist, heavy, slightly acid soils
<b>BLUEGRASSES</b>				
<b>BULBOUS</b>	15-30	Sept. 1 - Nov. 1	Sept. 1 - Nov. 1	Fertile, well drained lands
<b>CANADA</b>	15-20	Sept. 1 - Nov. 1	Mar. 1 - Apr. 15	Widely adapted
<b>KENTUCKY</b>	15-25	Sept. 1 - Nov. 1 Feb. 1 - Apr. 15	Mar. 1 - May 1	Fertile, moist soils of low acidity
<b>BROMEGRASS - Smooth</b>	18-25		Mar. 15 - May 15	Deep clay or clay loam
<b>CALIFORNIA MOUNTAIN</b>	20-25	Sept. 1 - Nov. 1	Feb. 1 - Apr. 15	Wide adaptation
<b>BUCKWHEAT</b>	40-50	May 1 - June 15	May 15 - June 15	Wide adaptation
<b>CEREALS</b>				
<b>BARLEY - Winter</b>	75-100	Sept. 15 - Oct. 15	Sept. 15 - Oct. 15	Loams and clays, well drained
<b>BARLEY - Spring</b>	75-100	Mar. 20 - May 1	Apr. 1 - May 1	Loams and clays, well drained
<b>OATS - Winter</b>	80-100	Sept. 15 - Nov. 1		Moist clay loams
<b>OATS - Spring</b>	80-100	Mar. 1 - May 15	Mar. 15 - May 15	Moist clay loams
<b>RYE - Winter</b>	75-100	Sept. 15 - Nov. 1	Sept. 1 - Nov. 15	Moderate drainage, wide adaptation
<b>RYE - Spring</b>	75-100	Mar. 1 - May 15	Feb. 15 - Apr. 15	Moderate drainage, wide adaptation
<b>WHEAT - Winter</b>	80-120	Sept. 15 - Nov. 1	Sept. 1 - Nov. 1	Bench and bottom lands
<b>WHEAT - Spring</b>	80-120	Mar. 15 - May 1	Mar. 15 - May 1	Bench and bottom lands
<b>CLOVERS</b>				
<b>ALSIKE</b>	6-8	Feb. 1 - June 1	Apr. 15 - June 1	Fertile, acid lowlands
<b>LADINO &amp; WHITE</b>	6-8	Apr. 1 - June 15	Apr. 1 - June 15	Moist, fertile soils
<b>RED</b>	10-12	Feb. 1 - June 1	Apr. 15 - June 1	Well drained, fertile soils
<b>MAMMOTH RED</b>	10-12	Feb. 1 - June 1	Apr. 15 - June 1	Fertile uplands, moderately moist
<b>SWEET - YELLOW &amp; WHITE</b>	12-15	Apr. 1 - June 1	Apr. 15 - June 1	Light to medium soils of low acidity
<b>CRIMSON</b>	12-15	Sept. 10 - Sept. 30	Apr. 1 - June 15	Well drained, fertile soils
<b>STRAWBERRY</b>	6-8	Apr. 1 - June 1	Apr. 15 - June 1	Moist alkali soils

LILLY'S FARM SEED PLANTING CHART

Officially Approved

CROP	POUNDS OF SEED PER ACRE	PREFERRED TIME OF SEEDING		SOIL ADAPTATIONS
		WEST OF CASCADES	EAST OF CASCADES	
Listed alphabetically under the names most commonly used in the Northwest.	Seed-bed conditions and soil fertility influence the amount.	Safe Spring seeding dates for perennial grasses depend on the amount of moisture in the soil.	Lack of recommended dates indicates that the crop is not generally adapted to that region.	It is more profitable to suit the crop to the land than to change the land for the crop.
CORN - FIELD	8-12	May 1 - June 1	May 1 - June 1	Fertile loams or clays, well drained
CRESTED WHEATGRASS	broadcast 10-12 rows 2-5		Mar. 1 - June 1	Drylands
FESCUES				
CHEWINGS	12-18	Sept. 15 - Oct. 15 Feb. 1 - Apr. 15	Mar. 20 - May 15	Well drained, fertile benches
CREEPING RED	12-18	Sept. 15 - Oct. 15 Feb. 1 - Apr. 15		Well drained, fertile benches
MEADOW	20-25	Sept. 15 - Oct. 15 Feb. 1 - Apr. 15	Mar. 20 - May 15	Moist meadowlands
ALTA, Tall	20-25	Sept. 15 - Oct. 15 Feb. 1 - Apr. 15	Mar. 20 - May 15	Wide soil adaptations
BIRDSFOOT TREFOIL	5-6	Apr. 15 - June 1	Apr. 15 - June 1	Moist soils, acid or mild alkali
MEADOW FOXTAIL	12-18	Sept. 15 - Nov. 1 Feb. 1 - Apr. 15	Apr. 15 - June 1	Low, poorly drained lands
MILLETS				
FOXTAIL	20-25	May 15 - June 15		Warm, fertile loams
JAPANESE	25-35	May 15 - June 15		Loams and shot clays in coastal areas
PROSO or HOG	25-40	May 15 - June 15		Warm loam soils
ORCHARD GRASS	20-25	Sept. 1 - Nov. 1 Feb. 1 - Apr. 15	Mar. 1 - May 15	Well drained soils
PEAS - Field				
WINTER - Austrian	65-90	Sept. 15 - Nov. 1	Sept. 10 - Sept. 30 Mar. 1 - May 1	Clay loams and bottom lands
SPRING - Canada (Yellow)	75-100	Mar. 1 - May 1	Apr. 1 - May 1	Well drained clay and loam soil
SPRING - Alaska (Green)	120-140	Feb. 1 - May 1	Mar. 1 - May 1	Well drained clay and loam soil
RYE - GRASSES				
COMMON - Oregon	20-25	Sept. 15 - Oct. 15		Low lands - poor drainage
ITALIAN	20-25	Sept. 15 - Oct. 15		Low lands - poor drainage
SORGHUM	4-8	May 10 - June 1	May 10 - June 1	Warm, deep, fertile loams
SOYBEAN	35-60	May 1 - June 1	May 1 - June 1	Warm, fertile loams
SUDAN GRASS	rows 8 broadcast 25	May 1 - June 15	May 1 - June 1	Warm clay loams
TALL MEADOW OAT - GRASS	20-25	Sept. 15 - Nov. 1 Feb. 1 - Apr. 1	Mar. 15 - May 15	Fertile, well drained uplands
TIMOTHY	8-10	Sept. 15 - Nov. 1 Feb. 1 - Apr. 1	Mar. 15 - May 15	Fertile, moist, medium to heavy soils
VELVET GRASS or MESQUITE	15-20	Sept. 15 - Nov. 1 Feb. 1 - Apr. 15		Wide adaption
VETCHES				
COMMON or GRAY	50-75	Sept. 15 - Nov. 1 Feb. 15 - Apr. 15		Well drained, fertile loams
WILLIAMETTE	60-75	Sept. 15 - Nov. 1 Feb. 15 - Apr. 15		Well drained, fertile loams
HAIRY or WINTER	20-40	Sept. 15 - Nov. 1	Mar. 15 - May 15	Wide adaptation, needs good drainage
HUNGARIAN	50-75	Sept. 15 - Nov. 1		Medium wet, acid soils
PURPLE	60-80	Sept. 15 - Nov. 1 Mar. 1 - Apr. 15		Well drained clays or loams
HAY MIXTURES, grasses & legumes	25-30	Sept. 1 - Nov. 1	Mar. 15 - May 15	Fertile clays, loams and bottom lands
PASTURE MIXTURES, grasses & legumes	20-30	Sept. 1 - Nov. 1 Feb. 1 - Apr. 1	Mar. 15 - May 15	Widely adapted

# THE MIRACLE OF 2,4-D



## —on the Farm!

These two wheat fields were both grown under identical conditions—except for one thing! The field at the left was treated with 2,4-D. The one at the right was not.

Here is a perfect picture of the miracle of 2,4-D, the new chemical that has solved one of agriculture's greatest problems.

In the pictures above, the crop happens to be wheat. But 2,4-D is doing the same job for many

other crops, too. All types of small grains, corn, pasture grass, potatoes, berries and many others show equal results. Although 2,4-D is still new, its use now extends over millions of acres—and is growing rapidly.

If you are using 2,4-D—or considering its use—we suggest that you talk it over with us!

## —on the Lawn!

### Recognize 'em?

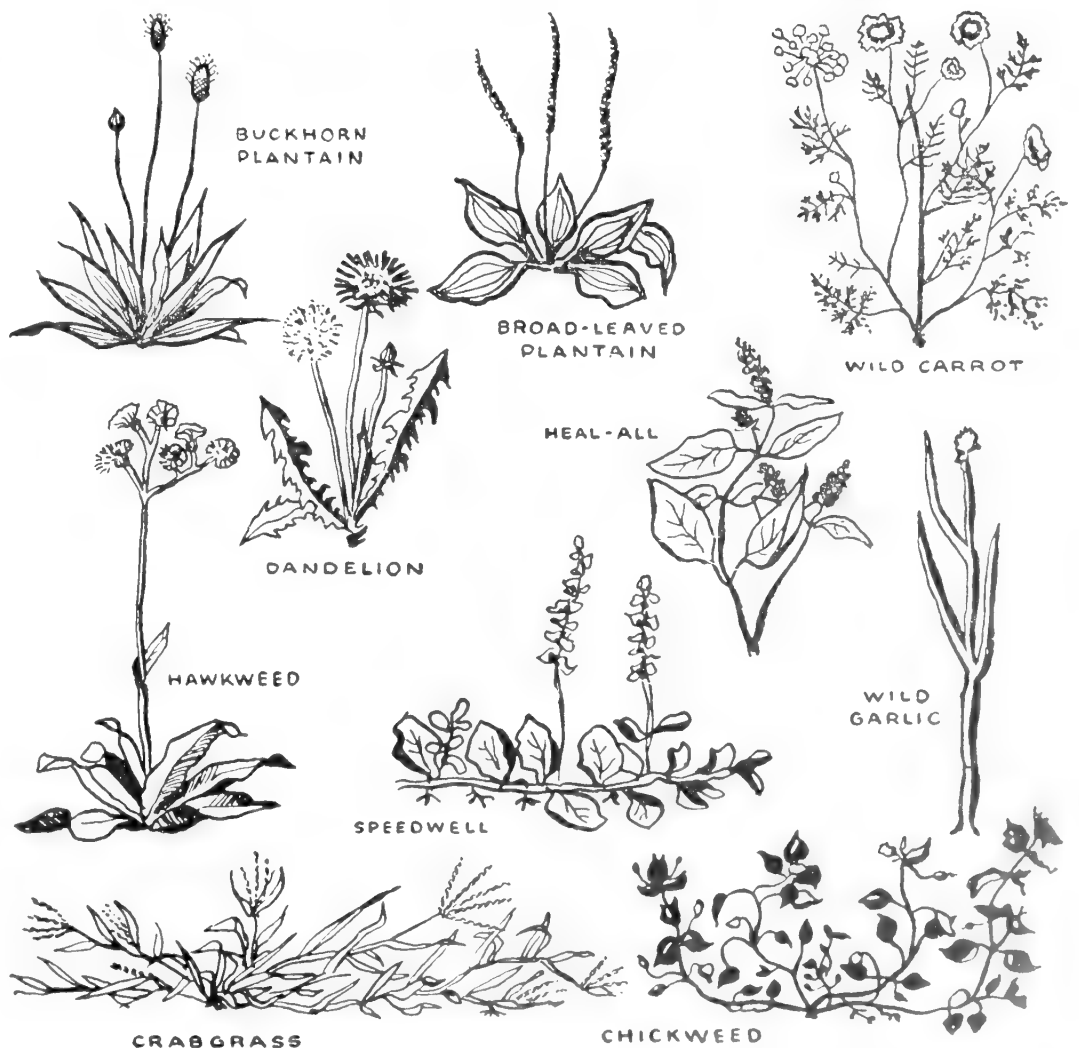
2,4-D first gained its fame as a weed control **for lawns**. Today its use on lawns is so common that millions of lawns are completely weed-free, **all through spring, summer and fall**.

If you haven't tried 2,4-D on your own lawn, you've missed a real thrill. It's not just that 2,4-D makes weed killing so easy. The big thrill is **the result** you get—a smooth, even expanse of lawn grass, without weeds and without the ugly scars that weed-killing used to produce.

In the pictures at the right, you'll recognize some of your lawn enemies.

All these, and many others, are easily eliminated by 2,4-D. You just spray it on—and wait a little while. If the application has been proper, **results are automatic!**

### COMMON LAWN WEEDS







# VEGETABLE SEEDS

## Specially selected for our territory

### VEGETABLES FOR FREEZING

The symbols (fr) following the variety names indicate vegetables suitable for home freezing.

#### ASPARAGUS

*A hardy perennial; will bear over 20-year period if properly cared for. We recommend purchase of ASPARAGUS ROOTS rather than seeds, as roots produce crop 2 years earlier. If seed is used, sow thinly in drills in early Spring. Cover to 1/2" depth. Thin plants to 6 inches apart and when a year old transplant to heavily enriched beds. 1 ounce will sow 60' of drill.*

**Washington Giant Rust-Proof (fr)**—Thick tall green spears with purple tops. Highly rust resistant. Rapid growing Tender.

#### BEANS

##### Green Podded, Dwarf or Bush

Sow in rows 2 1/2' to 3 1/2' apart. Plant seed 1 1/2" to 2" deep and 3 to 4" apart. Do not plant until danger of frost is past. Press soil firmly around seeds. Thin young plants to about 6" apart. Keep cultivated until plants blossom. **DO NOT CULTIVATE** when blossoms are at prime or when plants are wet with dew. Keep vines picked to insure a longer bearing period. Make plantings every two weeks for supplies throughout the season.

**Burpee's Stringless Green Pod (fr)**—Large, sturdy plants. Meaty, round pods, brittle and strictly stringless at all stages. Medium green pods, oval, yellowish-brown seed. 54 days.

**Tendergreen (fr)**—Large, erect plants. Abundant, round, dark-green pods, strictly stringless and fleshy. 54 days.

**Topcrop (fr)**—51 days—**All America Gold Medal Winner for 1950.** One of the outstanding horticultural introductions in recent years. An early maturing, bush bean, outstanding for its productiveness as compared to the older varieties now in use. Pkt. 15c.

##### Wax Podded, Dwarf or Bush

**Improved Golden Wax (fr)**—Small, erect plants moderately productive. Straight, thick, flat pods, creamy yellow and stringless. 51 days.

#### BEANS, POLE

*In warm ground, set poles 4' to 8' long slanting a bit to the north in rows 4' apart. (Extending north and south the poles will be 3' apart in the row.) Plant 5 to 8 beans about 1" deep around each pole. When growth is sufficient, thin to the four strongest plants.*

*Caution: To avoid spreading plant diseases, do not cultivate or pick when plants are wet.*

**Blue Lake**—Widely used for processing. Round pods, medium green, stringless when young—and good canning qualities. 64 days.

**Kentucky Wonder (fr)**—Strong climber hardy, long-bearing. Curved, almost round pods. Slightly stringy, but brittle and fibreless. Meaty. 65 days.

**Oregon Giant or Yount**—Large prolific plants, good climbers. Pods are thick-oval, always stringless, and very meaty. 71 days.

**Scarlet Runner**—Large plant growth. Often planted for its brilliant scarlet flowers. Pods broad, oval and meaty. Used for snap and green shell beans. 90 days.

#### Lima

*Plant in dry, warm ground. Make rows 2' apart and drop beans 6" apart in row. Cover with 1" of soil. Can also be planted in hills, 3' apart one way and 2' apart the other way. Use 4 to 6 beans per hill.*

**Burpee's Bush Lima**—Known for its large, high-quality seeds and productiveness. Vines 14 to 20 inches tall, spreading in growth, medium green. Pods 4 1/2 to 5 inches long, 3 to 4 seeds per pod, broad-flat. The seed is large, colored entirely dull white with greenish tinge.

**Oregon Pole Lima**—An excellent Lima that does very well in our area. A heavy producer of large, white seeds—delicious as a butter or dry Bean—76 days. 10c Pkt.

#### BEETS

*Deep, rich sandy loam produces finest beets. As soon as ground can be worked sow in drills 18" apart and press soil firmly over seed. When tops are 3" to 6" tall, pull them and use for cooked greens. Continue this until roots stand 6" apart. Plant every 10 days or so.*

**Detroit Dark Red (fr)**—Standard of excellence in table beets. Smooth globular roots of deep ox-blood red—sweet and tender. 68 days.

**Early Blood Red**—A turnip shaped beet with dark red roots. Fine quality. Medium early. 65 days.

**LILLY'S Early Wonder**—Early variety. Semi-globular, tender blood-red. 58 days.

**Little Marvel**—A flat-type beet with small tops. Matures early. Color is very dark and solid throughout. 58 days.

ALL VEGETABLE SEEDS

10c PER PACKET

UNLESS OTHERWISE NOTED

## DOWN-TO-EARTH ANSWERS TO EVERY-DAY QUESTIONS

The Home Gardening Guide sections of this and following pages of our Garden Annual tells, in as few words as possible, what every gardener should know. It is planned to be of informative value to you the whole gardening season, not as a mere garden starter. Here you will also find practical every day facts you'll want as a foundation for successful gardening.

All the data in the Home Gardening Guide sections is necessary information for the gardener of limited experience. We urge all such gardeners to study and follow the suggestions offered here.

The good seed we sell you will yield results in direct ratio to your observance of these notes. Much of what we say is, of course, already known by the old timers. But some of our facts are necessary reference material for all gardeners.

If you still have questions unanswered after reading this book, come in and let's talk them over. Take advantage of our wealth of experience . . . it's yours for the asking.

## 8 Fundamentals of Planning

No one can fully plan your garden for you, because garden planning is a highly personal, individual matter. Give your own ideas and desires plenty of play—and you'll enjoy your garden more.

There are certain absolutely basic facts that apply to all home garden planning.

**1—Plan to use your garden full time.** To do this you'll need catch crops, intercrops (also called companion crops) and succession crops. **Catch crops are early vegetables**, like spinach, that you grow very early before a crop like late cabbage is set out. **Intercrops are planted between the rows of larger vegetables**, like head lettuce between rows of broccoli. **Succession crops are catch crops in reverse**—they follow early crops. For instance, Chinese

cabbage will mature fine heads if planted after an early crop of peas has been taken.

**2—Divide the garden into three sections if possible, (1) Root vegetables, (2) Leaf vegetables, and (3) Fruit vegetables.** By switching these three groups every year you avoid many soil-borne diseases and insects and get better use of fertilizers. This isn't absolutely necessary, but it is one of those details that the smart gardener watches.

**3—On level ground**, you can run either east and west or north and south. If east-and-west layout is used, be sure to plant taller vegetables to the north. **On sloping ground**, the rows must run across the slope, not up and down. Otherwise all your plant food and much of your topsoil will go down the hill when it rains.

**4—Plan to grow enough vegetables for storing and canning.** Remember that correct storage begins with planting so provide for this when planning your garden and ordering seed.

**5—In smaller gardens, don't plant space-wasting crops** like Potatoes, Pumpkins, Sweet Corn and Vine Squash. On the farm these can be grown with the field crops, saving the more highly cultivated garden space for the more productive vegetables that need closer attention. **Many gardeners report that Zucchini and other bush squashes gave better results than Eggplant and satisfied many of the requirements for vining Squashes.**

**6—Include perennial vegetables when possible.** Rhubarb, Asparagus, Horse Radish and Perennial Onions can be grown on one side of the garden where they won't interfere with plowing or cultivating. Small fruits should be included whenever space will permit, since the quality of home-grown berries is far better than any you can buy.

**7—Avoid growing vegetables your family doesn't like and won't eat, but be sure to include plenty of those they do like.** If they're fond of beans, for instance, don't be satisfied with a single large planting, but make several smaller plantings at two weeks intervals.

**8—Study the chart on page 22.** This will tell how far apart rows should be, how long each crop takes to mature, and how much space you will need to provide the vegetables your family likes. After you have taken into consideration the crops you want to grow, make a rough sketch showing the location of each crop, with catch crops, intercrops, succession crops indicated.

SQUASH, Early Prolific Straightneck

CABBAGE,  
Early Flat DutchCABBAGE,  
Copenhagen Market

SQUASH, Zucchini

ONIONS, Green Bunching



**SWISS CHARD**

*Requires about same treatment as beets. Cultivate frequently. Leaves may be gathered during summer and fall. New ones will grow quickly.*

**Giant Lucullus**—Most popular Chard. Upright in growth, with yellowish-green curled crumpled leaves. Thick, broad and light green stems. 50 to 60 days.

**Rhubarb Chard** — Heavily crumpled leaves, dark green with a translucent crimson stalk. Easily grown, everywhere. A different, tasty delicious flavor—cook stalks and leaves together for a new taste thrill. 60 days. Pkt. 15c.

**BROCCOLI**

*Plant and cultivate like cabbage and cauliflower.*

**Italian Green Sprouting (fr)**—Plant bears a succession of sprouting heads about 5-in. long, which, if kept cut, will be replaced by others for 8 to 10 weeks. 55 to 65 days.

**St. Valentine (Winter Cauliflower)**—Large headed variety—excellent quality. Good shipper. Heads solid white and well protected. 90 days.

**BRUSSELS SPROUTS**

*Easy to grow wherever conditions are favorable for late cabbage, and requires same culture. As sprouts begin to form remove lower leaves so that all nourishments sent to lower stem will be forced into the sprouts.*

**Dwarf Improved**—Firm, thick-set tender heads. Easily grown. Early, dependable.

**CABBAGE**

*Sow seed in drills 6" apart across the bed, dropping the seed 5 to 6 to the inch. Firm soil after covering, then water thoroughly. Keep beds moist but not soaking wet. Seed germinates 3 to 8 days depending on temperature. Transplant to open ground when plants have made fourth pair of leaves. Set out as soon as frost danger is past. Use plenty of good commercial fertilizer. Cultivate frequently, every 5 or 6 days until cabbages are large. For winter storage, stand plants upright in cold cellar, with roots in sand. Slight freezing will not harm cabbage.*

**Danish Ball Head or Hollander**—A widely used late type. Deep round,

hard, compact heads, 7 to 8-in., 6 to 7-lb. Tender, crisp, fine for kraut. 100 to 105 days.

**Early Dwarf Flat Dutch**—A compact, upright, short-stemmed variety. Heads large for size of plant, somewhat flattened shape, very solid. Matures early. 71 days.

**Early Jersey Wakefield**—Pointed heads, small and firm. Earliest pointed variety. Plants compact. 62 days.

**Golden Acre**—Extra early variety producing uniform well-balanced head. Weighs about 3 lbs. Excellent quality. 65 days.

**Premium Late Flat Dutch**—The best late variety. Large, round, flat solid heads of perfect shape. Less inclined to burst than many varieties. Tender; fine quality.

**Red Dutch**—Medium size with round, solid heads of deep red. A good keeper and shipper. Medium early. 80 days.

**Drumhead Savoy**—Large, flat heads with dark green, crinkled leaves. Flavor is mild and appetizing. 6 to 7 lbs. 90 days.

**Wong Boc**—A short stout oval variety. Compact and well balanced. 85 days.

**CARROTS**

*Use sandy loam enriched by manure the previous year, if possible; but any good land if deeply and well worked will produce a good crop. Sow seed as early as ground can be worked. Sow seed 1/2" to 1" deep in drills 16" to 18" apart. Press soil firmly above seed. When plants appear use cultivator or wheel hoe and thin from 2" to 6" apart, according to type. Keep cultivated.*

**Danvers Half Long**—Sweet, tender roots, 6 to 7-in. long tapering to a blunt point. Fine for storing. 75 days.

**Golden Half Long Chantenay**—A medium early carrot. Fine for home and market. Roots are about 6 inches long, deep orange color and with practically no core. Crisp and sweet. 72 days.

**Improved Imperator (fr)**—Fine-grained, tender. Rich orange indistinct core. Roots smooth, tapered to semi-blunt. 77 days.

**Nantes Improved Coreless (fr)**—Excellent for forcing. Tops small, roots bright orange, blunt ended. Flesh reddish orange and practically coreless. 70 days.

**CAULIFLOWER**

Packet 25c

*Needs rich soil and abundant watering. Cultivate same as cabbage but protect heads from sunlight to insure the prized white curd. This is done by gathering leaves together loosely as soon as heads begin forming, and tying them at the top.*

**Early Alba Snowball**—An improved early variety for home and market. Dwarf plants produce large, firm white heads of finest quality. 70 days.

**Early Erfurt Snowball**—A popular early variety. Fine for home use or shipping. Compact and short-stemmed. 60 days.

**CELERIAC**

**Erfurt (Turnip Rooted Celery)**—A fine vegetable for flavoring in salads, soups, stews, etc. A large smooth, turnip like root formed under the ground comprises the edible portion of the plant. The hollow green stems above ground are not good for eating purposes. The roots may be stored up into the winter months—120 days.

**CELERY**

*Sow late spring for fall maturity. Have shaded beds and cover seed 1/4". Transplant when 6" high. Keep soil well fertilized and moist. Crop matures in cool weather of autumn.*

**Giant Utah**—Green type stocky plant full hearted and compact; blanches readily. Stems thick, solid, medium broad and full rounded. Fine quality. 120 days.

**CHICORY**

**Witloof**—Compact, blanched head. Crisp, broad leaves having pleasant sharp flavor. 140 to 160 days.

**COLLARD**

**Southern or Georgia** — An excellent cooked green. Long stemmed plant, with clustered leaves. Withstands heat and bad soil. 24 to 36 days.

Because of rapidly changing market conditions we must remind you that

**ALL PRICES  
IN THIS CATALOG  
ARE SUBJECT TO CHANGE  
WITHOUT NOTICE**

**WHEN TO PLANT**

**Fully Hardy Crops.** Sow anytime the ground is workable, just before or just after the winter freeze; where ground doesn't freeze in winter anytime soil and weather conditions are favorable for sowing. Peas, Asparagus, Broccoli\*, Brussels Sprouts\*, Cabbage\*, Collards, Cauliflower\*, Chinese Cabbage\*, Endive, Kale\*, Kohlrabi, Lettuce\*, Mustard, Onion sets, Parsley\*, Radish, Rhubarb, Salsify, Spinach, Turnip.

\* Seed sown indoors for transplants in freezing areas.

**Hardy Crops.** Sow in late winter or early spring when soil is in good tilth. Beet, Carrot, Celery, Leek, Wrinkled Peas, New Zealand Spinach, Onion, Spinach. Make sowings indoors of Egg Plant Pepper and Tomato about 8 weeks ahead of frost-free weather.

**Half-Hardy Crops.** Early sowing of these will probably require protection supplied by frost covers. Bush Beans, Corn, Squash, Tomatoes.

**Tender Crops.** Sow these in late spring

and early summer when the ground is warm. Use the frost-free dates for your area. Bush and Pole Snap Beans, Bush and Pole Lima Beans, Corn, Cucumber, Egg Plant\*, Muskmelon, Canteloupe, Watermelon, Okra, Pepper\*, Pumpkin, Squash, Tomato\*.

(\*Set out plants started 8 weeks earlier.)

**Year-Round Crops.** These can be sown any month of the year in temperate climate when soil is workable, but they do best during the cooler months of the year. Beet, Carrot, Lettuce, Parsley, Peas, Radish, Spinach, Swiss Chard.



**SWEET CORN**

Do not plant until all danger of frost is past. Be sure soil is well worked and dry—then drop 6 kernels of corn in a shallow hole made with the corner of the hoe. Cover each "hill" with about 1" of fine soil pressed down firmly. When 6" high, thin to three or four plants in each hill.

**Golden Bantam Improved (Golden Giant) (fr)**—A development from Golden Bantam. Kernels, deep and sweet, medium wide. Ears 10-14 rows. 82 days.

**Golden Cross Bantam 8 Row Hybrid (fr)**—Extremely uniform. Slightly lighter yellow than Golden Bantam. Highly resistant to Stewart's disease. 85 days.

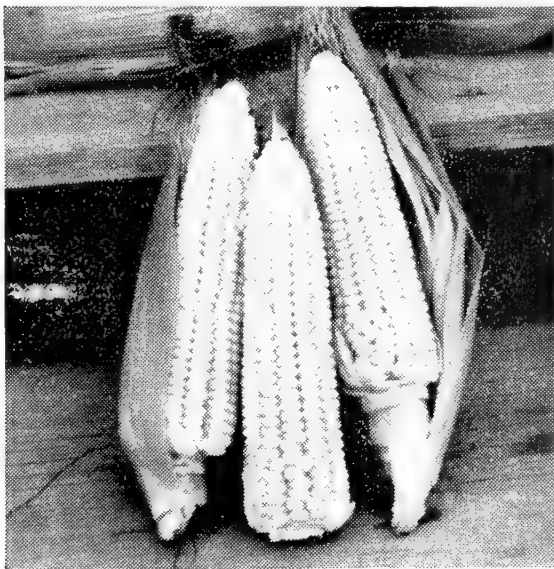
**Golden Early Market**—Tender, yellow kernels, of good flavor. 8-12 row ears. 72 days.

**Country Gentlemen**—A truly fine open pollinated White Variety that holds firmly its place in the back yard garden and freezing field. Medium ears, irregularly packed with tender, Sweet delicious kernels. 92 days.

**Spancross (fr)**—Extra Early Hybrid. Golden yellow. 6½ inch ears with well filled 10 or 12 rows of sweet kernels. 60 days.

**Marcross (fr)**—Second Early Hybrid. An ducing deep golden yellow kernels 7 early wilt-resistant yellow hybrid, prodays earlier than Golden Bantam. Ears 6 to 7-in. long, with 12-14 rows of large sweet kernels. 67 days.

**Carmelcross (fr)**—3rd early variety. Medium yellow. For market or home garden. Vigorous stalks about 5½ feet high. 7 to 10 inch ears. 73 days.



SWEET CORN, Spancross

**Golden Cross Bantam (fr)**—Extremely uniform. Ears 10 to 14 rows, slightly lighter yellow than Golden Bantam. Highly resistant to Stewart's disease. 85 days.

**CRESS**

**Pepper Grass**—Crisp, finely-cut leaves are superb for garnishing or adding pungent flavor to salads. Fast growing.

**CUCUMBER**

Select soil fully exposed to sun and enrich thoroughly with fertilizer. Seeds should be planted not over 1" deep in hills from 3' to 5' apart each way. Sow 15 to 20 seeds to a hill. When plants crowd thin to 3 plants per hill. Frequent shallow cultivation necessary until runners appear.

**Chicago or Boston Pickling**—Vigorous grower, fruits medium dark green, 6 to 7 inches long when grown; slightly tapering of even size. 58 days.

**Improved White Spine (Extra Early)**—Deep green, practically free from ridges. 7-in. long. Vines produce freely. 55 days.

**Lemon**—A very prolific variety crisp and well flavored. Use for salads and pickles. Fruits nearly round, deep lemon yellow color, somewhat resembles a lemon. 65 days.

**Long Green Improved**—Black spined, good pickling. Grows 10 to 15 in. long, 70 days.

**Straight Eight**—Unsurpassed as slicing cucumber. All-America Selection. 2½-lb. fruits, rounded at ends, medium green. 68 days.

**EGGPLANT**

*Requires continuous warm weather for best results. Seed should be started in a hotbed, as it is slow to germinate. Set plants in open ground when 2" tall and protect from hot sun when*



EGGPLANT

*young. Be sure to keep young plants developing rapidly. Cultivate freely. To produce large fruits, remove lateral branches so as to reduce number of fruits per plant. Spray to protect from potato bugs.*

**New York Improved**—A spreading plant with large, glossy, purple-black fruits. A heavy producer. 85 days.

**ENDIVE**

*Sow at intervals for continuous supply. When well started, transplant or thin to 1' apart. To blanch, tie outer leaves together over the center when plant is nearly grown. Just before killing frosts in fall, dig the plants, taking plenty of soil with roots—pack closely together and store in dark cellar for winter use.*

**Batavian Broad Leaved**—A strongly bunched mass of thick, slightly crumpled leaves, well blanched heart. Upright growing plant about 12 inches in diameter. 71 days.

**Green Curled**—Plants 16 to 18-in. in diameter. Fine fall variety. White, tender, fleshy. 95 days.

**HERBS**

(Aromatic, Medicinal and Kitchen)

Every garden has a place for herbs. In the vegetable garden or for their

**HERBS**

1. Chives 2. Dill 3. Marjoram, Sweet 4. Sage 5. Sweet Basil 6. Thyme.

ornamental appearance in the flower garden.

**Anise**—An annual—used for garnishing, seasoning and for cordials. Seeds have an aromatic flavor. Plants 14 inch. 75 days.

**Basil, Sweet**—Annual; Ht. 12 to 18 inches. Leaves, green or dried, are chiefly used as a seasoning for soups, stews, etc. 85 days.

**Chives**—Perennial; Ht. 6 inches. Tops, finely chopped for adding mild onion flavor to soups, stews, salads, etc. 80 days.

**Dill**—Annual; 2 to 3 feet. Seeds and leaves used for flavoring—especially for dill pickles. 70 days.

**Marjoram, Sweet**—Annual; Ht. 1 to 2 feet. Used for seasoning either fresh or dried. 70 days.

**Sage**—Perennial; Ht. 14 to 16 inches. Used for seasoning either fresh or dried. 75 days.

**Summer Savory**—Annual; Ht. 1 foot. Small spicy leaves are used in soups, stews and gravies. Adds pungent flavor.

**Thyme**—Perennial; Ht. 8 to 12 inches. Aromatic foliage used as seasoning. 85 days.

## Vegetable Seed Culture

There's no end to the science of vegetable gardening—nor to the books that have been written about this fascinating subject. But if you haven't the time to read all the books, then try the brief paragraphs that follow. Here are the fundamental facts—the things every vegetable gardener should know—AND DO!

### ASPARAGUS

Soak seed 24 hrs. before planting. Sow in loose, rich, moist soil after weather warms up. Thin to stand 6" apart. In early spring, set in permanent position, 24" apart, in rows 20" apart. Set in hole so that crown is 8" below surface, but only cover tips with 3" of soil. As plants grow, fill in until level. Don't cut first year after setting.

### SNAP BEANS

Don't plant until the weather is warm and settled.

Sow beans in bottom of 3" to 4" furrow, 24" between rows, but do not fill in with more than 1½" of soil over seeds. Thin to stand 4" to 6" apart in row. Bean seedlings are likely to be slowed up pushing through heavy soil. In such soils, cover seeds with mixture of half sand and half soil, or sand and peat or any other loose, light material that will allow seedlings to break through easily.

Make successive sowings every 2-3 weeks. Don't cultivate beans when wet: this may spread disease.

### BUSH LIMA BEANS

Plant two weeks later than bush snap beans, when soil is warm. Space rows 24" apart; otherwise follow instructions for snap beans.

### POLE BEANS and POLE LIMAS

Both these should be planted two weeks after bush beans. Rough poles set 3 feet apart should be used. Anchor well, as heavy beanvines blow over easily. Sometimes three poles set to form a tepee are used and several seeds planted around each tepee.

### SPECIAL NOTE ON ALL BEANS:

—Two scientific facts about beans will help produce better crops. First, being legumes, they should be inoculated with special legume culture listed in supply section. This enables plants to manufacture their own nitrogen from the air. Second, bud drop of the tiny flowers (even before they can be easily seen) cuts the early set of pods. By spraying with a fruit setting spray these buds are held on and the early crop increased by as much as 100 per cent.

### BEETS

Each "seed" is a fruit with several true seeds. No matter how thinly beets are sown, they will need thinning. Plant as soon as ground can be worked in spring, thin gradually (use thinnings as greens) until roots stand 3" apart. Make three sowings, one early, one three weeks later and one 60 days before fall.

### BRUSSELS SPROUTS

Grow like late cabbage, but don't use until after heads have matured.

### CARROTS

Pick carrots when they are the size of your little finger for sweetest flavor. They can also be left to grow to maturity for storage. When harvesting always remove alternate carrots to give space to the remaining ones.

### EARLY CABBAGE — COLLARDS

Start plants inside. Set out 12" x 24" as soon as weather is settled. Dusting with D.D.T. is safe if outer leaves are discarded, since plant grows from the inside out.

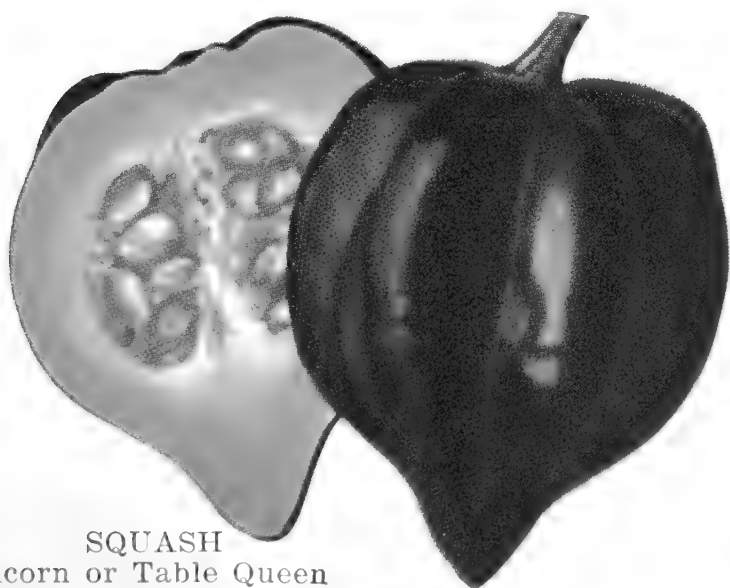
### LATE CABBAGE

Direct-seed four months before crop is wanted. Or start plants indoors 30 days before needed, transplanting outdoors 90 days before frost. Don't water freely when heads are nearly filled, as this promotes splitting; irrigate only enough to keep plants growing well.

### CELERY

Start in hotbed 60 days before needed. In setting outdoors, don't get soil in or over crown. Set 7" to 12" apart. Soil must be rich, moist and loose. As soon as plants have grown to 14" to 15" tall, set 12" boards on both sides of row and hold in place with earth. Or 4" drain tile can be used to blanch individual stalks. Celery must have warm, settled weather: if chilled, plants are likely to go to seed.

(Continued on page 18)



SQUASH

Acorn or Table Queen



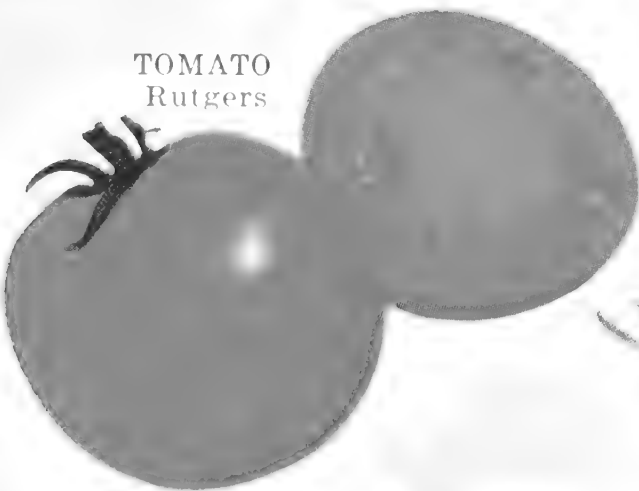
TOMATO

Jubilee



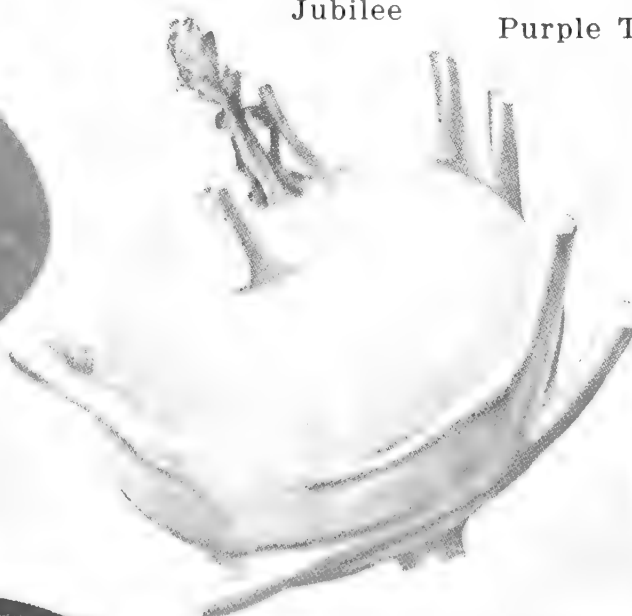
CABBAGE

Early Jersey Wakefield



TOMATO

Rutgers

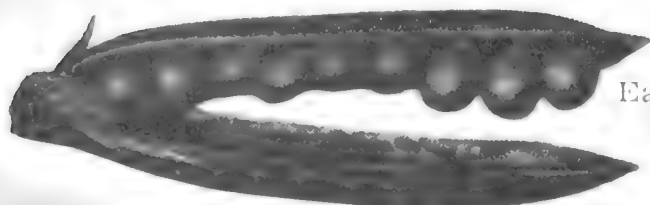


TURNIP

Purple Top White Globe

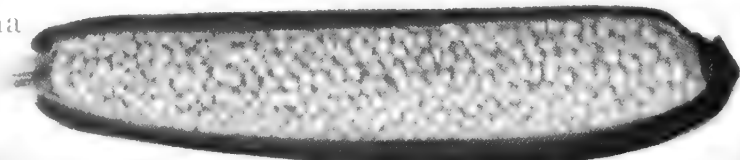


PEA, Gradus



KOHLRABI

Early White Vienna



SWEET CORN Country Gentleman



**KALE OR BORECOLE**

*Requires moist, well enriched soil. Pick leaves as wanted, or pull whole plant. Leaves are best after a frost.*

**Dwarf Green** — Widely spreading. Fine-curved, blue-green, plume-like leaves. 55 days.

**Thousand Headed** — Very productive variety. Tall plants, bearing an abundance of deep green, thick, smooth leaves. Grown for stock and chicken feed. 65 days.

**KOHLRABI**

*Sow early as possible in light, rich soil. When plants are in the third leaf, thin to 6" apart. Plant at intervals of 10 days for succession of bulbs until hot weather—after which they do not grow. Use while still young and tender, before skin hardens.*

**White Vienna Early (fr)**—8 to 10-in. leaves on slender stems. Bulbs 2 to 3-in., globular light green. Crisp tender, clear white flesh. 55 to 60 days.

**LEEK**

**Large American Flag**—An early, popular variety, with thick, long white stems. Leaves large and drooping medium green. 130 days.

**LETTUCE**

*Keep lettuce growing rapidly for best results. A light, rich soil needed for this. Earliest varieties must be started from seed in cold-frame. As soon as open ground can be worked transplant. For later use, sow seed in open ground as soon as weather is favorable. Keep rows 12" to 18" apart. Thin plants in rows 4" to 8" depending on variety.*

**Heading**

**Hanson**—Old hardy variety for home and market gardens. Large globular heads, compact tender and sweet. Light yellowish green leaves, broad and curly. 80 days.

**New York or Los Angeles**—Long distance shipper. Large curled heading lettuce. Dark green, curled edge leaves. Well blanched heads, sweet, and tender. 80 days.

**Pennlake, All America Bronze Medal Winner 1949**—An exceptional fine head lettuce. A cross between Imperial No. 847 and Great Lakes producing plants

distinct because of their lack of ribbiness, good uniformity and dark green color. 82 days. 15c pkt.

**Great Lakes, 1944 All America Winner**—A variety that came to the front fast and has stayed there. Holds into the hot weather longer than any other variety tested and retains its crisp, tender flavor to delight the most critical.

**White Paris Cos**—Medium large self-folding, dark green loaf shaped heads. Greenish-white well blanched interior. 66 days.

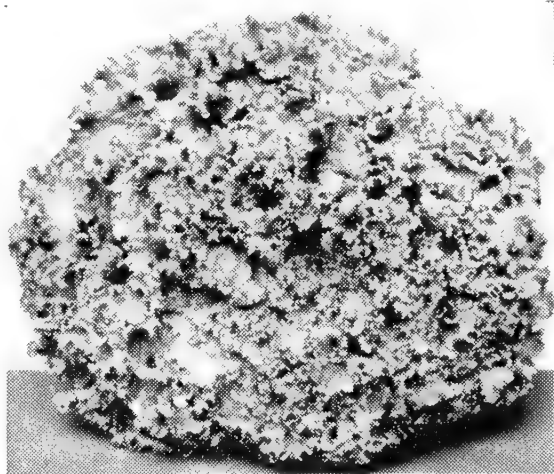
**Leaf**

**Grand Rapids**—Erect, compact plants. Light green broad heavily fringed. For forcing or early planting outside. 43 days.

**Oak Leaf**—The most popular leaf lettuce for home gardens. Rich, dark green leaves, tender and delicious. Outstanding resistance to hot weather.

**Prizehead, Red Leaf**—Early non-heading sort. Medium sized plants, crisp and tender. Color light brown on a medium green base. Leaves frilled at edges, and crumpled. 47 days.

**Simpson's Early Curled**—Also called Early Curled Silesia. Early, hardy and dependable. Non-heading. Leaves large frilled, crumpled, light green; form a compact bunch at center. 45 days.



LETTUCE, Grand Rapids

**MELONS****Muskmelon and Cantaloupe**

*Requires long season to develop and is easily injured by cool weather. Before planting, spade in liberal forkful of well rotted manure in each hill. Thin plants to 4 per hill after third leaf develops, and train vines in different directions. Cultivate as long as possible. On moist ground use shingles to hold melons off ground to prevent rotting.*

**Hale's Best**—Flesh thick, deep salmon-pink, sweet and tasty. Heavily netted rind, with faint stripe. Small seed cavity. Outstanding variety, resistant to powdery mildew. Weight, 4 lbs. 86 days.

**Hearts of Gold or Improved Hoodoo**—Nearly round 2-lb. fruit, distinctly ribbed, deep green with fine grey netting. Thick, deep salmon flesh, tender sweet. 94 days.

**Spear**—An early maturing, fine quality melon that does well in short season and has gained nice popularity in our locality.

**Tip Top**—A home garden and local market variety. Large fruits, slightly oval, pale green skin, turning to yellow at maturity. Ribbed and slightly netted. Flesh bright salmon, sweet and delicious. 90 days.

**WATERMELON**

*Requires about same culture as muskmelon, except the vines need more room. Fertilize each hill liberally and cultivate thoroughly.*

**Striped Klondike**—Large long melon, yellowish green with dark green stripes. Tough rind. Scarlet, delicious flesh. 90 days.

**Kleckley's Sweet or Wondermelon**—Large, cylindrical, dark bluish-green, with thin, tender rind. Bright red, juicy, sweet flesh, creamy-white seeds with traces of brown. 85 days.

**Green Klondike**—Fruits oblong, tapering to blossom end. Solid dark green rind. Flesh red, very fine textured and sweet. Small black seeds. 80 days.

**MUSTARD**

*Sow as early as possible in the spring. Keep rows 6" to 12" apart and cover with soil 1/2" deep. You may also sow seed in autumn to raise greens and for salads.*

**Mustard Spinach or Tendergreen**—Wholesome, quick-growing green, combining mustard and spinach flavors, 28 days.

**Southern Giant Curled**—Large, frilled and crumpled. Light green leaves. 35 days.

**OKRA OR GUMBO**

*Sow in rows about 3' apart. Cover seeds with about 1" of fine soil firmly pressed down. Thin plants 18" to 24" apart when they reach 3" growth. Do not plant until ground is warm, as this is a tender, hot weather plant. Pick before woody fibres develop.*

**Early Dwarf** — Early, prolific dwarf growing sort. Dark green fluted, 5 to 7-in. pointed pods. Most desirable, compact growing okra. 50 days.

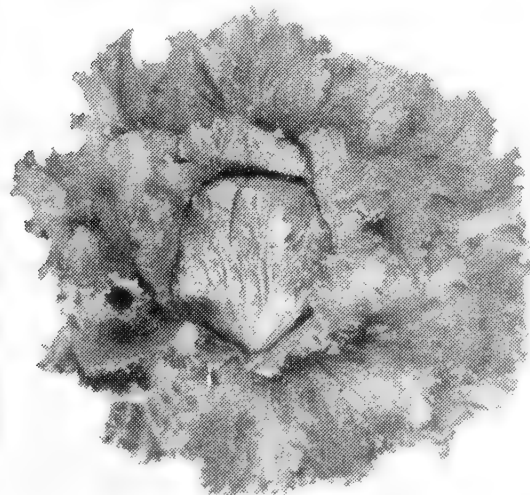
**ONIONS**

*Plant as soon as soil can be prepared. For best yield, plant on very fertile land—fall plowed, and thoroughly fertilized. When plants are a few inches tall, thin to prevent crowding—using the plants removed as green onions. Those left to become fully ripe can be stored for winter. Cultivate and hand weed every 2 weeks during summer.*

**Yellow Sweet Spanish**—Large, globe-shaped, exceptionally mild and sweet—excellent for eating raw or boiled. Light yellow skin and pure white firm, crisp, and tasty flesh. 112 days.

**Yellow Globe Danvers**—An oval shaped, straw-colored onion. White flesh, crisp and mild. Splendid keeper. 110 days.

*Continued on Page 20*



LETTUCE, New York



**CHINESE CABBAGE**

Must never be grown as a spring crop since it will only go to seed. Plant after June 15, as days are getting shorter, then it will head. An excellent succession crop to follow early peas.

**SWEET CORN**

For the home gardener, the simplest way to plant sweet corn is in rows or drills, not in hills. Space the rows 36" apart, and plant a seed about every 3". Thin stalks to stand 9" to 12" apart in row. The drill should be 3" to 4" deep, but don't cover seed with more than 1" of soil. The drill or furrow can be filled in as the plants grow to anchor them against the wind.

Removing suckers has been standard practice with practically all growers. Now, experiments prove that removing suckers merely takes away extra food-producing leaves and so hurts rather than helps growth. Also, suckering often disturbs roots enough to injure plant. Always plant corn in several short rows side by side rather than one long row. Corn is pollinated by wind and rows side-by-side means that all the stalks can be reached by the pollen. Many home gardeners, on reading newspaper accounts of corn detasseling, assume that this is necessary to set ears. On the contrary, removing tassels may cut the crop seriously. Detasseling is **only** done where hybrid corn is raised for seed purposes. The more pollen that flies, the better the set of kernels. So **don't** detassel sweet corn in the home garden. If weeds are under control, stop cultivating. If weeds are bad late in the sea-

son work the soil as shallow as possible to avoid injuring surface feeder roots.

**CUCUMBERS**

Sandy soils with plenty of compost are best. Roots have difficulty on heavy soils. Plant 8 to 10 seeds in a "hill." When vine is 6" long, thin to three strongest plants. Keep fruits picked to promote continuous fruiting. If compost isn't available feed with commercial fertilizers. Use plenty of moisture: cucumbers are 90 per cent water.

**EGGPLANT**

Start seed indoors 8 weeks before plants are needed. Set out after weather is warm and settled. Feed and water liberally as Eggplant needs to be kept growing rapidly to produce well. D.D.T. will control pests that until now made this a tricky crop to grow.

**ENDIVE**

Strictly a cool-weather crop: gets bitter at temperatures much above 80 degrees. Plant very early and again in mid-July. Use last planting as late fall salad crop, and store surplus in cold frame or cellar by digging each plant with ball of soil. Space 12" apart in rows 18" apart. Feed liberally for bigger, crisper heads.

**KALE**

Grow like Brussels Sprouts.

**KOHLRABI**

Wants rich soil. Plant early in spring 6" apart in row. Must be used when young: woody when old. Make second planting

three weeks later, and again after mid-July.

**MUSKMELON**

Plant 8 to 10 seeds to a hill after weather is warm. If grown in cool weather or where nights are cold, will not bear well and melons will have poor flavor. Melons love plenty of compost or well-rotted manure. When vines begin to run, thin three plants to a hill. In damp soil mulch with clean straw or raise each fruit on a shingle to keep them from rotting.

**OKRA**

Plant on rich soil when weather is hot and settled, spaced 36" x 15". Pods mature rapidly and must be picked or they will be inedible.

**ONIONS**

Sets produce sooner than seeds. Set 1" apart and pull every other set for use as green onions. Again pull every other onion, leaving balance of sets to mature as dry onions.

From seed, onions have better flavor. Green onions can be grown in about 60 days from seed. Use thinnings for green onions, leaving 4" apart for globe types and 6" for the big Spanish types to mature for dry onions. Latter can also be started indoors for largest bulbs and can be set out 6" apart after frost danger has passed. All onions need liberal feeding and watering.

CANTALOUPE,  
Tip Top

CORN, Golden  
Cross Bantam

Hearts of Gold

CARROTS,  
Imperator

CUCUMBER,  
Long Green

LETTUCE, Oak Leaf

COS LETTUCE, White Paris

**PARSLEY**

Seed germinates slowly; soak over night. Sow early as seed germinates poorly in hot weather. Space plants 6" apart. Plain parsley has best true parsley flavor; curly sorts better for garnishing. If leaves are cut off when plant is 3" tall, curly sorts will have better curl.

**PARSNIPS**

Must be planted as early as ground can be worked. Soil must be loose to a depth of 12" and cannot be heavy. Space 5" apart. Cold weather turns starches into sugar and improves flavor. Roots are hardy: leave in ground over winter if desired.

**PEAS**

Plant variety Alaska as soon as ground can be dug. Plant wrinkled varieties (which have better flavor) when narcissus buds show color or when crocuses are in bloom. Peas are not satisfactory when weather turns hot. Tall varieties must be staked. Peas want well-limed soil. Don't forget, inoculation improves production.

**PEPPERS**

Need long growing season: start indoors 8 weeks before plants are wanted. Set out after weather has become warm and settled. Set plants 15" x 24" and feed liberally for bigger fruits.

**PUMPKINS**

Follow muskmelon culture, or plant in corn after last cultivation.

**RADISHES**

As a rule the first crop to mature: plant as early as soil can be dug. Feed liberally for quick growth. Sow a 10 foot row every

ten days until weather turns warm. Start planting again with the coming of cool weather in fall. The fall and winter types are sown in mid-summer to mature in fall for storage.

**SPINACH**

Seed in fall (protect with straw) or in very early spring. Must mature before hot weather.

**Spinach (New Zealand)**

While this crop grows freely in hot weather, it will not germinate except when soil temperatures are below 70 degrees. Hence it should be sown with the half-hardy crops — Those that are planted when the narcissi bloom. Plant in soil with plenty of organic matter, spacing the plants about 3 feet by 3 feet. Keep them cut back, since only the young growing tips are eaten and long, woody stems have little flavor. Many who have tried a mixture of half Swiss Chard and half New Zealand Spinach say that this is better than either vegetable alone.

**SQUASH**

Follow culture given for muskmelon for vine types. Grow bush types in rows, spaced 24" apart. Keep picked. Will bear all summer.

**TURNIPS**

Follow directions for radishes. Thinnings can be cooked for greens.

**TOMATOES**

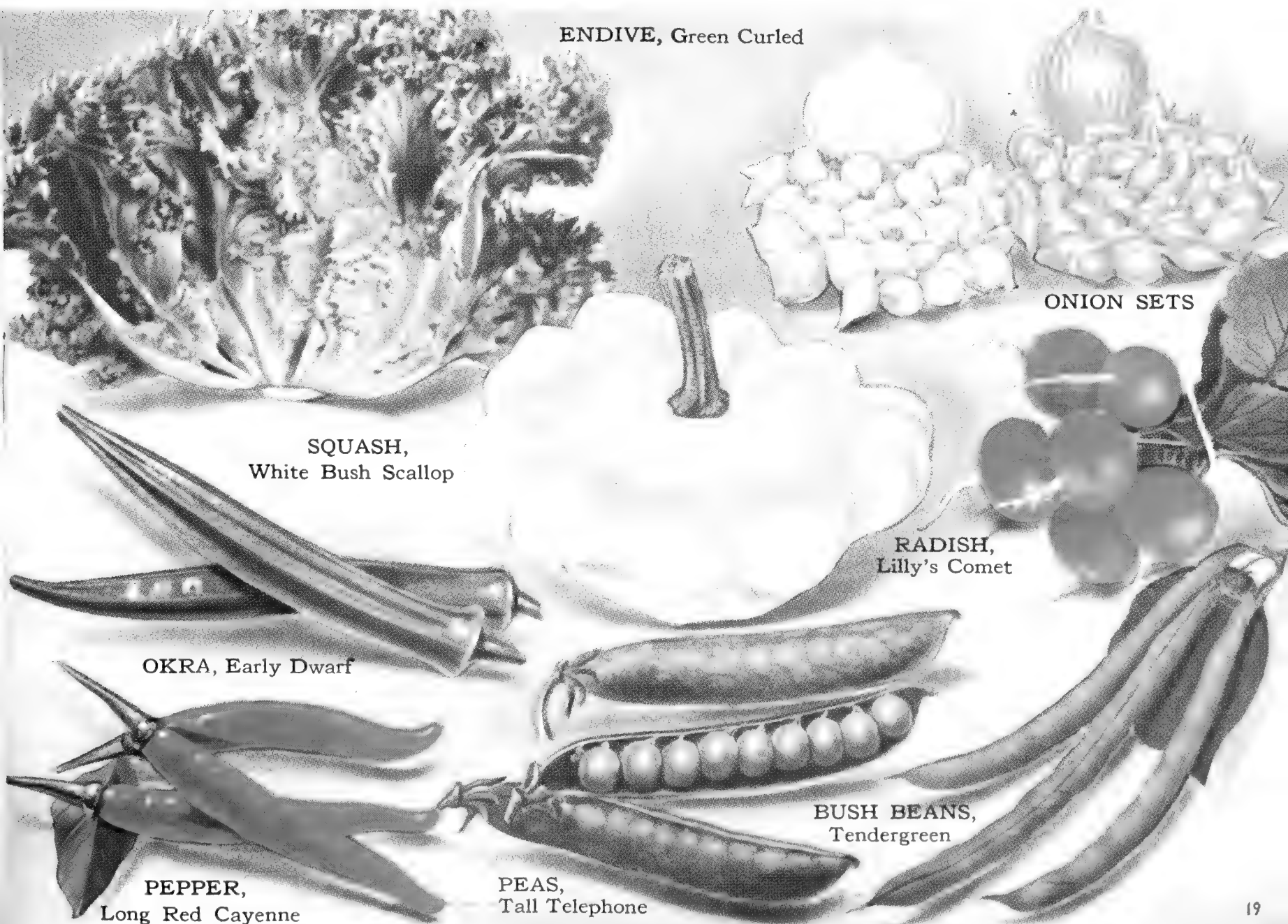
There are two schools of tomato culture—those who stake and those who don't. Reasons for and against are as follows: **FOR STAKING:** While staked plants produce fewer fruits per plant, they produce **more tomatoes for a given area.** So if

room is at a premium, it will pay to stake. Staked plants usually produce cleaner fruits and bear somewhat earlier.

**AGAINST:** Staking calls for much extra labor in staking, tying and pruning. The total production per plant is higher in unstaked and unpruned plants. If you have plenty of room, the saving in labor makes the unstaked method the best. All commercial canning crops of tomatoes are grown in this way. If the ground under the vines is covered with a mulch of clean straw, this will improve the quality of the fruits and will also keep weeds down and save moisture.

When staking, set plants 18" apart in the row, in rows 3 feet apart. Use a 7 foot stake, driven 1 foot into the ground. Tie plant to stake with soft twine or other plant tie. Habit of growth calls for a side shoot from the first point where a leaf joins the main stem, another side shoot from the second leaf joint, and a flower cluster from the third joint. This 2-1 pattern of growth is repeated up the entire stem. The staked plant is allowed to grow from the tip, and as it grows, the stem is tied to the stake. As the side shoots appear, these are pinched out or rubbed off, leaving the flower clusters to produce fruits. When training tomatoes to stakes, be sure to leave all possible foliage to hide the fruits from direct sunshine; otherwise they will sunscald.

When grown without staking, the vines will sprawl on the ground. This means they will need more room. Three feet between plants and four feet between rows will not be too much ground to use if you can spare the room.



ENDIVE, Green Curled

ONION SETS

SQUASH,  
White Bush ScallopRADISH,  
Lilly's Comet

OKRA, Early Dwarf

BUSH BEANS,  
TendergreenPEPPER,  
Long Red CayennePEAS,  
Tall Telephone



**ONIONS, Continued**

**White Queen Bunching or Pickling**—A good Spring appetizer. Crisp and mild. A fine white onion for cooking when grown larger. 60 days.

**Red Wethersfield**—Popular good keeper, used extensively for sets. Medium large, flat bottomed bulbs with sloping top. Purplish-red. Fine grained flesh, firm, slightly flushed with pink. 100 to 102 days.

**PARSLEY**

*Does best in rich, mellow loam. Seed is slow to germinate, and is helped by soaking in warm water over night before planting. Sow early and not too deeply. When curled varieties are about 3" tall, cut off leaves. The new growth will be brighter and curlier.*

**Champion Moss Curled**—Compact, dark green leaves, curled and fine-cut. 70 days.

**Hamburg or Rooted**—Large tapering roots resembles small parsnips. Excellent for food flavoring.

**PARSNIP**

*Plant in rich, sandy loam, thoroughly pulverized. Seed requires plenty of moisture for germination and should be sown early. Dig after a killing frost. Freezing improves parsnips, so some can be left in the ground all winter and used in spring. For storage, bury in dry sand.*

**Hollow Crown (fr)**—The most generally grown kind. Roots 2½ to 3-in. thick at shoulder. 12 to 14-in. long, uniformly tapered, hollow crowned. 95 days.

**PEAS**

*Early peas need a light, warm soil; but general crop thrives best in moderately heavy soil. (Avoid fresh manure and very rich or wet, mucky soil as this produces large growth of vine at the cost of quality of the peas.) Plant seed in rows at 2" depth. Keep rows 21" to 28" apart for dwarf varieties and 28" to 42" for the taller types. Gather crop as fast as it is fit to use or new pods will cease to form and those partly advanced will cease growth.*

**Blue Bantam**—Best of the early dwarf large-podded varieties. Vines 24-30 inches tall. Long pods containing 7-8 large, succulent peas. 62 days.

**Gradus or Prosperity**—Medium green stocky plant. Broad, pointed single

pods, medium green. 6 to 8 wrinkled tender peas in tapered pods. 60 days.

**Little Marvel (fr)**—Outstanding, dwarf. Fine quality, large yield. Single and double, dark green, 3-in. pods—blunt plump, well filled with 7 to 8 medium sized, light green tender peas. 62 days.

**Tall Telephone (fr)**—Large podded variety of the Telephone family. Excellent for home gardens, truckers, shipping to distant markets and for freezing; resistant to Fusarium wilt. Vine dark green, coarse.

**PEPPERS**

*Warm, mellow soil in sheltered location is best. Start under glass. Cultivate regularly, drawing soil up around stems. When plants are 7" to 8" tall, hoe in light dressing of commercial fertilizer. Do not plant hot peppers near sweet; they are apt to cross.*

**Sweet**

**California Wonder Improved**—Number one quality peppers, about 4-in. long and 3½-in. diameter very smooth, 3 and 4 lobed, glossy green, turning bright crimson when ripe. Remarkably thick walls, tender, sweet. 75 days.

**Chinese Giant**—An extra large sweet pepper. Short, light-green stocky plant. Deep green, chunky, square ended fruits, changing to deep scarlet. 80 days.



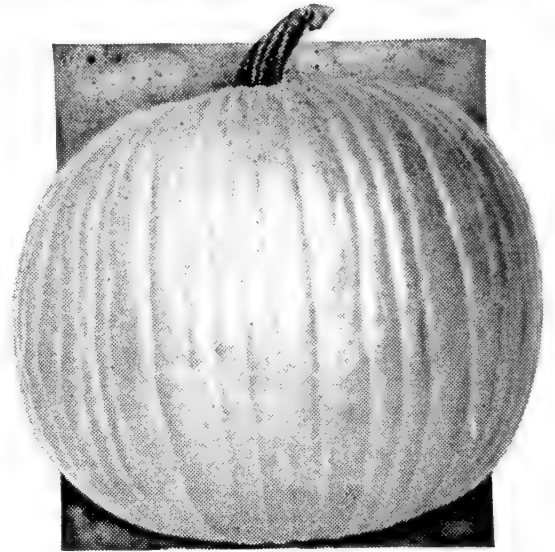
PEPPER, Large Bell

**Large Bell or Bull Nose**—An early variety, popular as a pickling sort. Fruits 2 inches in diameter and 3 inches long. Usually mild and sweet, occasionally hot on account of pungent ribs. 60 days.

**Pimento or Perfection**—Best of the medium sized sweet peppers. Excellent for stuffing. Smooth, heart-shaped about 3-in. long. 125 days.

**Hot**

**Long Red Cayenne**—The hot favorite. For canning, pickling, drying. Pungent flavored fruit, tapering and twisted. 70 days.



PUMPKIN, Sugar

**PUMPKIN**

*Plant in middle of spring among corn; or in hills 8" apart each way. Drop 4 seeds to a hill. If planted in hills, cultivate the same as melons and cucumbers. For winter use gather before frost (leave stem 3" to 4" long) and store in warm, dry place.*

**Connecticut Field**—Large fruit with flat ends, 15 to 25-lbs. and up to 15-in. Surface slightly ribbed, deep orange. Thick flesh, orange-yellow, sweet and coarse. 118 days.

**Sugar or Sweet Pie**—Desirable for pie or general use. Round, flat end fruit, deep orange. Thick, yellow-orange flesh. 118 days.

**RADISH**

*Soil should be light, quick and rich to insure rapid growth. Slow growth makes the flavor too strong. Sow as early as ground can be worked, as Radishes are very hardy. Make successive sowings up to hot weather. When in the third leaf, thin to give roots plenty of room. Pull promptly when mature. The secret of crisp, delicious radishes is quick growth, prompt picking.*

**Lilly's Comet**—A bright red, round radish. Crisp and tender. Remains good for long period. Best radish for home use. 25 days.

**Chinese Rose Winter or Scarlet China**—Popular, very distinct winter sort. Good for late salads. Cylindrical blunt smooth, bright rose-red. Flesh white very firm and pungent. 52 days.

**Early Scarlet Globe**—Globular, slightly elongated, bright scarlet. 24 days.

**French Breakfast**—Roots thicker toward bottom. 1½-in. long by ½ to ¾-in. Dull scarlet, white tipped. 25 days.

**Long Bright Scarlet**—A long tapering red radish. Brittle and crisp. The standard long red kind. 29 days.

**Sparkler or Earliest of All**—Carmine red with white tip. Flesh white crisp and mild. 26 days.

**White Icicle**—Tapering roots 5 to 5½-in. very white with pure white, mild flesh. 27 days.

**PRIZE WINNER!**

**Freezonian All America Bronze Medal Winner of 1948**—Luscious, melting peas that retain their garden fresh sweet flavor after freezing. The vigorous two and a half feet wilt resistant vines bear an excellent crops of 3½ inch pods well packed with 8 or 9 medium sized peas. 63 days. Pkt. 15c.



**RUTABAGA**

(See Turnip)

**SALSIFY**

*Light, rich soil best and it must be stirred to a considerable depth. Sow in rows 18" apart. Cover seeds firmly with 1/2" of fine soil and thin plants later to 2" to 3" apart in the row. Cultivate the same as parsnips or carrots.*

**Mammoth or Sandwich Island**—A palatable and nutritious vegetable when cooked. Flavor is remarkably similar to oysters. 120 days.

**SPINACH**

*Plant very early in spring—or start seed in fall giving it protection by 3" of straw over the winter and enjoy an early spring crop. Cut all spinach before hot weather as it doesn't do well in extreme heat. Sow again in August or September for fall crop. Spinach should be gathered before the flower spike appears.*

**Bloomsdale Savoy, Long Standing (fr)**—A few days later than regular Bloomsdale Savoy. Holds from 12 to 14 days longer. 42 days.

**Giant Nobel or Giant Thick Leaf**—Large, vigorous, spreading plant, slow to form seed stalks. Heavy yielder. Large, thick, smooth, deep green leaves. 45 days.

**Mammoth Victoria Long Standing**—An early, heavy-producing variety with dark green crumpled leaves. 48 days.

**New Zealand**—Thrives in dry, hot weather. Can be picked repeatedly all season. Not a true spinach, but similar when cooked. 70 days.

**SQUASH**

*Very sensitive to cold so delay planting until warm weather. Follow same care in planting and culture as for cucumbers and melons. Plant summer varieties 6 or 8 seeds in hills 3' to 4' apart each way and winter squash 8' apart. Plants bear longer if squash is picked off as soon as it is ready for use.*

**Butternut**—New, the finest small winter squash. Deep buff-colored, bottle-shaped fruits. Smooth, hard shell. Solid fine textured flesh, that is deep yellow, dry, sweet, with excellent flavor. 12-in. long, upper or neck section 3 1/2-in. diameter. 95 days.

**Banana**—Cylindrical and pointed at blossom end. Thin, gray rind. Thick flesh, fine grained, yellowish orange and of sweet flavor. 105 days.

**Golden Hubbard**—Similar to Green Hubbard but earlier, smaller and more prolific. Somewhat pointed at each end. 8 to 10 lbs. Moderately warted. Orange-red with faint cream color stripes toward blossom end. Flesh deep orange, dry. Keeps well. 100 days.

**Early Prolific Straightneck (fr)**—Earlier smaller, and more productive than Giant Summer Straightneck and more uniform. Brilliant yellow. Fine for home or market. 50 days.

**Table Queen or Des Moines (fr)**—Acorn-shaped, green, deeply furrowed; flesh rich yellow, dry, mealy, delicious. Convenient size for baking and serving in halves. 100 days.

**Buttercup**—A turban type with dark green rind, lightly striped. Orange flesh. Dry and well flavored. 100 days.

**Marblehead**—One of best commercial sorts. Resembles Green Hubbard somewhat in size and shape. Color bluish-gray; flesh bright creamy yellow. Fine grained, dry sweet. An excellent keeper for winter use.

**Dollar or White Bush Scallop**—Fruits greenish when young become white at maturity. 3-in. long, 7 1/2 to 8 1/2-in. wide. 53 days.

**Reselected Green Hubbard (fr)**—Most widely grown of any winter squash. Round warted, dark green with thick yellow flesh. Weight 12 to 14 lbs. 100 days.

**Giant Yellow Straightneck**—A bush squash with long fruits, heavily warted. Straight, orange-yellow with thick sweet flesh. 65 days.

**Zucchini**—Straight, cylindrical fruits, 3 to 4 lb., 5 to 5-in. through 10 to 14-in. long. Mottled and striped green-creamy-gray. Delicate flavored flesh. 60 days.

**TOMATOES**

*Do best in shady, well pulverized loam. Sow seed in hotbed or indoors. When plants are about 2" high, set out, 3" apart, in boxes or pots—later transplant into the garden. Or keep in flats until all danger of frost is past, and then set plants out directly into the garden. Water around the roots of the plants when setting them out, if ground is dry. Cultivate frequently until plants shade the ground. Remove all but the two or three strongest branches. Study methods of staking and training vines and adopt the one best suited to your situation.*

**Beefsteak**—Rich scarlet-red, extra large fruits, more or less ribbed. Juicy, solid, with rich sub-acid flavor. One of the best for home use. 90 days.

**Bonny Best**—Second early variety, valuable for canners. Medium-vine not very hardy. Medium-sized, apple-shaped, solid fruits bright scarlet. 73 days.

**Break O' Day**—Medium size, scarlet smooth, round fruits. Wilt resistant. Vigorous and prolific. 70 days.

**Jubilee**—Orange colored fruit. Juicy with few seeds. Weighs about 6 oz. Bears over a long season. 72 days.

**Marglobe**—Moderately productive, with heavy foliage. Vigorous and resistant to wilt and rust. Fruits medium large, nearly round, smooth, and solid. Deep red. 77 days.

**Pritchard's, Scarlet Topper**—Medium to large, round, with thick, firm flesh and small seed cavities. Brilliant red throughout, coloring right to top without hard green spots. Free from acidity, one of the best home canners. Early.

**Puget Sound Special Earliana**—Open,

spreading, medium small vines. Red fruits run to medium size. This seed is selected for thick, smooth fruit. 66 days.

**New Stone**—Medium late. Popular with canners. Ripens evenly. Fruits large, flattened. Scarlet red. Fine flavor. 86 days.

**Rutgers**—Second early variety. Large thick stems, vigorous foliage. Fruits similar to Marglobe but flatter at stem end. Bright red, with thick walls. Red, firm flesh, low acidity. 78 days.

**STOKESCROSS HYBRIDS!**

**We are proud to offer the greatest tomato development in decades:**

Hybrid tomatoes open a new and alluring future to the grower. No gardener can overlook the factors of increased vigor, higher production and fine flavor of a Hybrid Tomato.

**Stokescross No. 2 (Hybrid)** Developed for those desiring a four ounce, crack free tomato of high color and flavor, maturing within 60 days of transplanting to the field. A tomato of high table quality and heavy production record. Pkt. 25c.

**Stokescross No. 5 (Hybrid)** Outstanding in the production field with increases up to 30% not unusual. A six ounce tomato of high flavor and rich color recognized by growers for its unusual vigor, maturing within 75 days from transplanting. Pkt. 25c.

**Victor**—Round smooth, scarlet. Early. 3-inch fruits. Excellent for home and market. 65 days.

**Small Fruited**

**Ground Cherry**—Small yellow fruit enclosed in a husk. Very sweet, prized for eating, making pies and preserves.

**TURNIP**

*For summer greens or roots, sow as early as radishes and lettuce. Then cut when plants are 6" high. Sow again in summer for fall and winter use. Turnips do best when most of their growth is made in autumn or early spring. Should be grown rapidly for best flavor and texture.*

**Purple Top White Globe (fr)**—All purpose variety. Large, sweet tops. Smooth globe-shaped roots, purple-red above, white below. Sweet, tender, crisp, white flesh. 50 to 60 days.

**Snowball**—Small, erect tops. Medium sized roots, round, white throughout crisp and tender. 45 days.

**Yellow Aberdeen**—A fine winter turnip. Root is globe shaped, pale yellow, firm. Leaves are cut. Skin is yellow with purple top. 80 days.

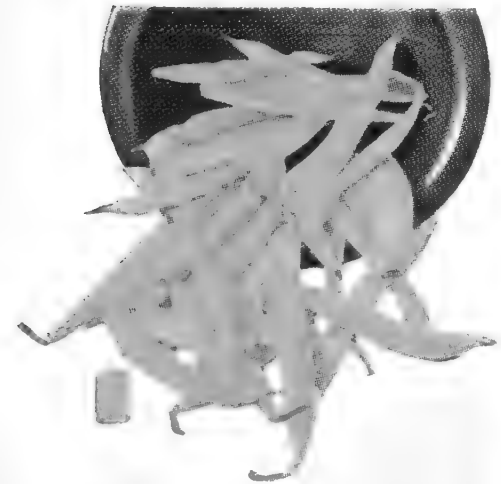
**Rutabaga or Swede Turnip**

**Lilly's King of Swedes**—Hardy and productive. Tender firm, light yellow sweet flesh. 88 days.

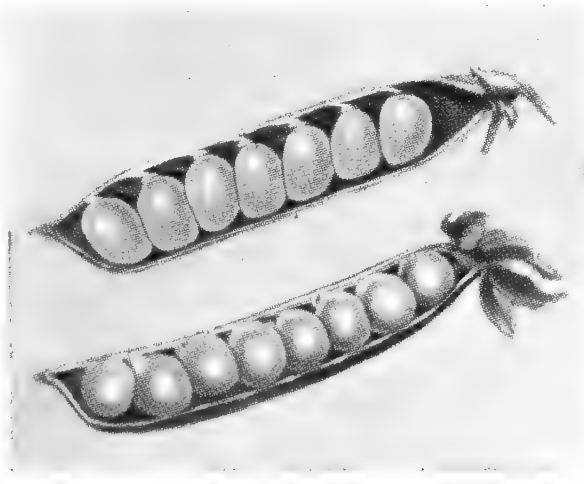
# VEGETABLE GARDEN PLANTING GUIDE

	Seed Required for 50 ft. of row	Distance Between Rows (inches)	Distance Apart In Row (inches)	Depth to Plant (inches)	Approx. Yield Per 50 ft. of row		Seed Required for 50 ft. of row	Distance Between Rows (inches)	Distance Apart In Row (inches)	Depth to Plant (inches)	Approx. Yield Per 50 ft. of row
ARTICHOKE	1/8 oz.	48	48	1/4		LETTUCE	1/4 oz.	18	12	1/4	50 head
ASPARAGUS	1/2 oz.	24	20	1/2	25 lbs.	MUSKMELON	1/2 oz.	60	48	3/4	50 fruit
BEANS, BUSH	1/2 lb.	24	4	1 1/2	20 qts.	MUSTARD	1/4 oz.	24	9	1/2	1 bu.
BEANS, LIMA	1/2 lb.	24	3	1	32 qts.	OKRA	1 oz.	36	15	1	450 pods
BEANS, POLE	1/2 lb.	36	8	1 1/2	30 qts.	ONION	1/4 oz.	18	4	3/4	1 bu.
BEANS, POLE LIMA	1/2 lb.	48	8	1 1/2	1 1/4 bu.	ONION SETS	1 pt.	12	2	1	60 bun.
BEETS, TABLE	1/2 oz.	24	3	1/2	1 1/4 bu.	PARSLEY	1/4 oz.	12	6	1/2	45 bun.
BEETS, MANGEL	1/2 oz.	28	4	1		PARSNIPS	1/2 oz.	18	4	1/2	1 bu.
BROCCOLI	1/8 oz.	24	24	1/2	25 head	PEAS	3/4 lb.	24	2	1	1 bu.
BRUSSELS SPROUTS	1/8 oz.	24	18	1/2	15 qts.	PEPPERS	1/8 oz.	30	20	1/2	300 fruit
CABBAGE	1/4 oz.	24	12-24	1/2	35 head	PUMPKIN	2 oz.	96	60	3/4	25 fruit
CHINESE CABBAGE	1/2 oz.	24	12	1/2	40 head	RADISH	1/2 oz.	12	2	1/2	50 bun.
CARROTS	1/4 oz.	16	3	1/2	24 qts.	RHUBARB	1/2 oz.	48	48		100 stem
CAULIFLOWER	1/4 oz.	24	20	1/2	25 head	RUTABAGA	1/8 oz.	24	6	1/2	1 bu.
CELERY	1/8 oz.	24	6	1/4	100 stalk	SALSIFY	1/2 oz.	18	2	1/2	300 roots
COLLARDS	1/4 oz.	30	18	1/2	3 bu.	SPINACH	3/4 oz.	18	5	3/4	1 1/2 bu.
CORN, SWEET	4 oz.	36	9	1	100 ear	SPINACH, N.Z.	1/2 oz.	36	18	1	50 lbs.
CORN, POP	3 oz.	34	8	1		SQUASH, BUSH	1/4 oz.	48	48	1	60 fruit
CUCUMBER	1/2 oz.	48	36	1/2	100 fruit	SQUASH, WINTER	1/4 oz.	72	72	1	35 fruit
DILL	1/4 oz.	18	4	1/2		SWISS CHARD	1/2 oz.	18	15	1	25 lbs.
EGG PLANT	1/8 oz.	36	24	1/2	75 fruit	TOMATO	1/8 oz.	40	36	1/2	2 bu.
ENDIVE	1/2 oz.	18	12	1/2	50 fruit	TURNIP (roots)	1/4 oz.	18	4	1/4	1 bu.
KALE	1/2 oz.	32	22	1/2	50 plant	TURNIP (greens)	1/2 oz.	12	4	1/4	1 1/2 bu.
KOHLRABI	1/4 oz.	24	6	1/2	1 bu.	WATERMELON	1/2 oz.	96	96	3/4	20 fruit

BEANS, Golden Wax



PEAS, Little Marvel (Top)  
Blue Bantam (Bottom)



BEETS, Lilly's Early Wonder



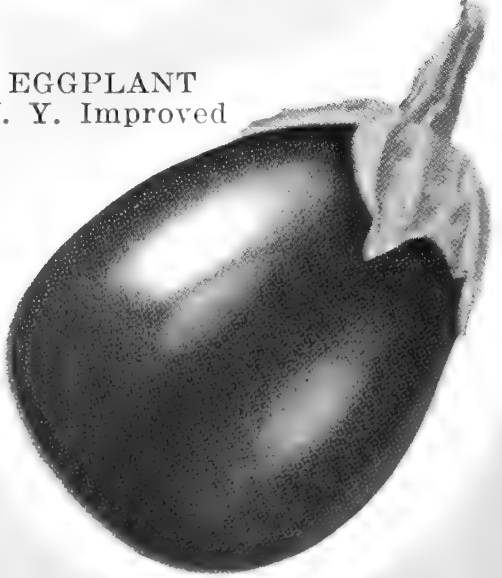
BEANS, Bush Lima



BEANS, Burpee Stringless



EGGPLANT  
N. Y. Improved





# BEATING THESE INSECTS IS EASY WITH KNOW-HOW

Ever since the first garden was planted, the fight between gardeners and insects has gone merrily along.

But nowadays that fight is growing easier, year by year. Just reasonably good strategy is all the gardener needs to win.

To make the job even easier, we present here a highly valuable anti-bug weapon. This is our series of natural color portraits of the common garden enemies (at the right).

## To Beat Them, KNOW THEM!

These unique pictures have just one purpose—to help you identify the pests in your own garden.

Once you know exactly which insect you are fighting, the job is easy. There's a proper insecticide for every one of them.

That's where our color pictures are so extremely useful. When you have these life-like portraits before you, identification is easier and more certain than ever!

## Ask Us for the Remedy!

Insects are spread over the season and in different stages of life from the egg, the larva to the bug itself. Their methods of attack vary in two ways either as chewers or suckers. The wide variety of harmful insects in their varied stages of life require in some cases vastly different chemicals to meet the immediate requirements.

To link up each bug with the insecticide that will handle him, JUST ASK US. We keep very close watch on all new developments. We know exactly which of the new formulas have proved themselves . . . and what they can do. This practical knowledge is at your service, whenever you need it!

So—with this weapon at hand, let's work together. You identify 'em! We'll prescribe for 'em! And from then on, Mr. Bug will have a pretty bad time of it.

## For Insecticides SEE THE SEEDSMAN!

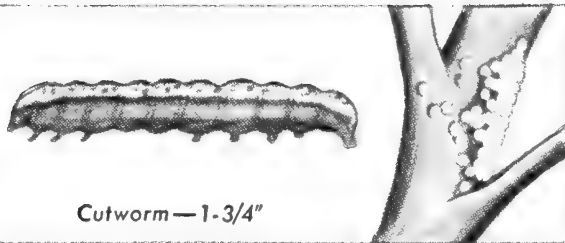
You can buy insecticides in many types of stores.

But there's only one type of store where the necessary KNOW-HOW goes along with the merchandise.

A good seedsman isn't only a merchant. He's a garden doctor, always on the job to help you make your home more beautiful, more fruitful. He KNOWS!

Therefore, plain common sense says,

**"FOR INSECTICIDES SEE THE SEEDSMAN!"**



Cutworm—1-3/4"



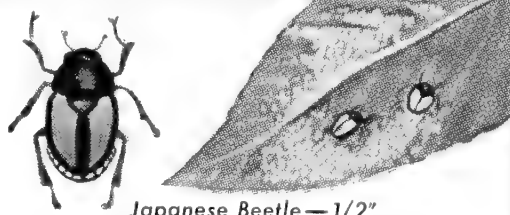
Tomato Hornworm—3" to 4"



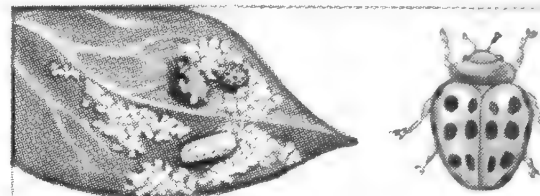
Cabbage Worm—1"



Giant Slug—4" or more



Japanese Beetle—1/2"

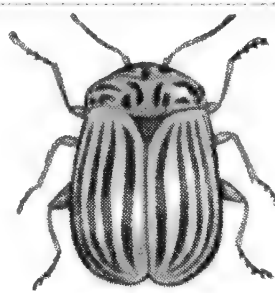


Mexican Bean Beetle—5/16"

# PORTRAIT GALLERY OF GARDEN INSECTS



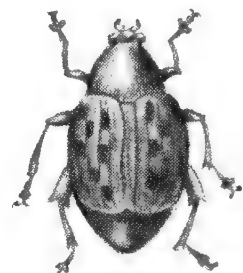
Asparagus Beetle—7/32"



Potato Beetle—3/8"



Potato Flea Beetle—1/16"



Bean Weevil—1/8"



Chinch Bug—3/16"



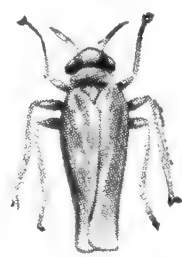
Tarnished Plant Bug—1/4"



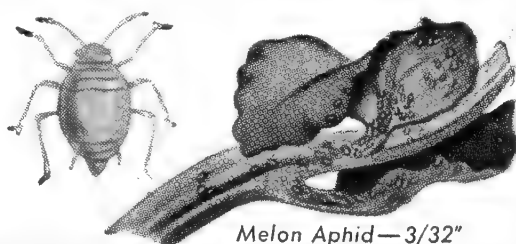
Red Spider Mite—1/60"



Rose Chafer—3/8"



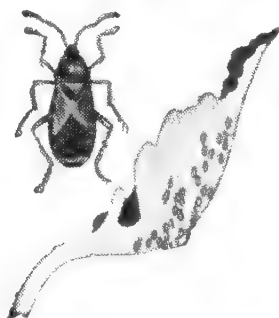
Beet Leafhopper—1/16"



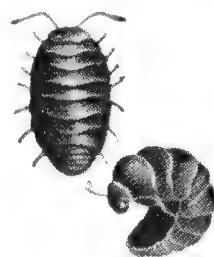
Melon Aphid—3/32"



Bean Aphid—3/32"



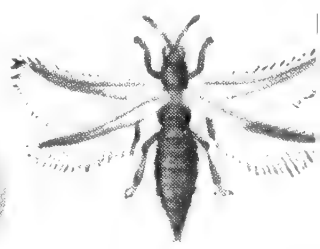
Squash Bug—5/8"



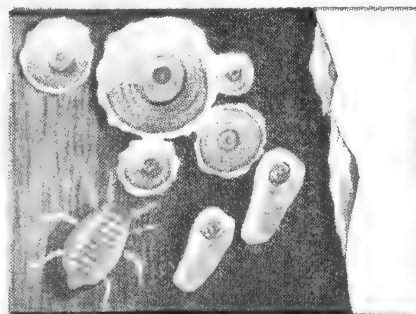
Sow Bug—1/2"



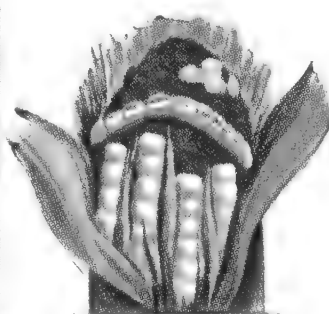
Mealy Bug—3/16"



Gladiolus Thrip—1/16"



San Jose Scale



Corn Earworm—2"



Oyster-shell Scale

# FREEZING

# VEGETABLES

HOW

WHEN

WHERE

Freezing vegetables to retain their garden-fresh flavor and texture for winter use is being done successfully by increasing tens of thousands of homemakers each year. Varieties suitable for freezing are indicated by "fr" in the vegetable seed listings of our Garden Annual. Plan your garden to include them.

Select your vegetables as to family likes and dislikes and the number of meals you plan to serve. Each package should contain a "one meal portion" for the whole family. Balance your freezer space accordingly to assure a variety of choices



## AT-A-GLANCE QUICK FREEZING GUIDE

VEGETABLE	PREPARATION	SCALDING TIME
ASPARAGUS	Freeze within 2 hrs. after picking. Cut in 6" spears for quart packages or 1" pieces. Wash well. Iron utensils should be avoided.	3 min.
BEANS, Green and Wax	Sort for tenderness, crispness medium size and quality. Wash in cold water, snip off ends. Break into 1" pieces or slice lengthwise. Leave small beans whole.	2 min.
BEANS, Lima	Use green tender easily opened pods. Shell, wash, sort for size and color. Keep picking to freezing time within 2 hrs.	Young beans 1½ to 2½ min. Mature white 2½ to 3 min.
BEETS	Choose tender, medium size, young 2" beets. Top thoroughly, peel. Dice or ¼" slices.	2½ min.
BROCCOLI	Select for compactness, dark green color and tenderness. Let stand in salt water ½ hour to kill insects. Wash well, trim off waste, split stalks and heads long way in 1" pieces.	Small stalks 3 min. Large stalks 4 min.
CARROTS	Coreless, medium length carrots are best. Top, wash, scrape. Dice or ¼" slices, leave small ones whole.	3 min.
CAULIFLOWER	Use smooth, firm heads. Trim off waste. Break into 1" pieces.	3 min.
EGG PLANT	Wash, peel, slice ½" thick. Prepare one scalding at a time to avoid discoloring. Cool in 3 teaspoons citric acid powder crystals to one quart of cold water. After blanching use freezer paper between slices.	4 min.
PEAS	Select tender firm pods. Avoid using immature, wrinkled and bleached pods. Wash, shell, sort for quality, removing large starchy peas. Wash. Keep picking to freezing time within two hours.	45 to 60 sec.
SQUASH, Winter	Use firm flesh squash, acorn, green hubbard or other hard rind variety. Cut, remove seeds. Bake or steam until done. Scoop from shell. Mash. Set pan in ice water to cool quickly. Do not season.	None
SQUASH, Summer	Best type is young with small seeds, tender skin. Cut into table use sized cubes after washing well. Cook as though for table use without seasoning and minimum of water. Set pan in ice water. Freeze quickly.	None
SWEET CORN on Cob	Select as though for immediate table use eliminating flavorless immature and over mature toughkerneled ears. Remove silk and husk, trim waste. Use 6 ears per quart in scalding. Set rack in ice water. Drain corn completely. Wrap individually, seal ends of wrapper. Freeze promptly.	Scald according to ear diameter 1½" ear—7 min. 2" ear—9 min. Bigger—11 min.
SWEET CORN Cut Kernels	After scalding, slice corn from cob. Rinse well in cold water to remove inedible cob hulls. Drain quickly and thoroughly. Freeze promptly.	See above
TURNIPS	Medium size, tender, perfect, non-pithy turnips are best. Top, wash well and peel. Wash and dice in ½" cubes.	2½ min.

## THE HANDY WAY TO BUY PEAT MOSS

It is no longer necessary to struggle with the weight of a full bail of peat moss or have to provide it with storage space in your crowded garage for just occasional use.

Lilly's Peat Moss is packed in convenient, handy-sized sacks just right

for mulching and soil-conditioning jobs around the garden. Only the best, selected, dry peat moss is used. Lilly's Peat Moss is ground fine especially for garden use.

3/4 CU. FT. BAG . . . 65c

## LILLY'S Peat Moss





# FLOWER SEEDS

*The Finest in  
the World*



SEE OUR FEATURE SELECTIONS, PAGE 2

## AFRICAN GOLDEN DAISY

(a) Culture II, 18"

Branching plants with an abundance of rich, glossy, daisy-like flowers about 2½" across. There are darker zones and halos in the center of the blooms. Does well in dry, sunny spots.

## AGERATUM

(a) Culture II, 6-12"

**LITTLE DORRIT, Blue**—A dwarf plant with lovely azure blue flowers that are formed profusely in hot weather. Prefers light soil and sunny spot.

## ALYSSUM

(a) Culture II, 4-6"

**LILAC QUEEN**—A lovely lilac colored flower. Ideal for edgings and borders. Free-blooming and showy.

## ARABIS—Alpina, White—Rock Cress

(hp) Culture VI, 1'

Creeping plants with small flowers in early spring. Fine for edging.

## ARCTOTIS—Blue-eyed African Daisy

(a) Culture I or II, 3'

**GRANDIS**—Two-inch daisies of pearly white with bluish centers.

## ASTER

(a) Culture I, 1½-2½'

**BRANCHING, Mixed**—Four inch double flowers of compact form. Brilliant colors.

**SUNSHINE, Mixed**—4" flowers. Loose row of petals, quilled center.

**GIANT CREGO**—Large 4-inch flowers with fluffy effect. All colors.

## KEY TO SYMBOLS

The symbols after the name of each flower give you the following information:

(a)—Annual

(hp)—Hardy Perennial

(b)—Biennial

(s)—Suited to semi-shade

Information on how to grow is indicated by the Culture Number. Refer to Page 31 for complete data.

**GIANT CREGO, Pink**—Lovely medium pink.

**GIANT CREGO, Purple**—Rich color.

**GIANT CREGO, Crimson**—Brilliant.

**GIANT CREGO, White**—Snowy white.

**PRINCESS, FINEST MIXED**—An excellent flower for the homegardener because of high wilt resistance. The plants grow about two and a half feet tall with three to three and a half inch flowers on long stems. Crested center surrounded by multiple rows of guard petals. Pkt. 25c.

## BABY'S BREATH—Gypsophila

(a) Culture I, 24"

**SNOWFLAKE**—An improved pure white form. Flowers are larger than usual. They are bell shaped with flat petals that give snowy effect.

**PINK ELEGANS**—Similar to above variety but with a clear rosy pink color.

## BACHELOR'S BUTTONS—Centaurea, Cornflower

(a) Culture II or IV, 3'

**BLUE BOY**—A fine, clear blue. Flowers are large. Color intense. Pkt. 15c.

**MIXED**—All colors. Excellent for mixed bouquets.

**ALL FLOWER SEEDS 10c PER PACKET UNLESS OTHERWISE NOTED**

## 103 FLOWER SUGGESTIONS FOR PLANNERS

**For Shady Locations**

Most annuals need plenty of sunlight, but there are a few which do fairly well in the shade, or with partial sun. The following are worth a trial in shady spots:

Cornflower	Cleome
Nasturtium	Candytuft
Pansy	Larkspur
Vinca	Lupine
Coreopsis	Godetia
Nicotiana	Lobelia
English Daisy	Bleeding Heart

In the vine group, those which often prosper in fairly shady places are **Cardinal Climber**, **Cup-and-Saucer Vine**, and **Morning Glory**.

**For Hot, Dry Locations**

In spots where the sun beats down mercilessly all day long, many flowers can not prosper. But some of the annuals can do well, even in these difficult locations. Here's a good list:

Sweet Alyssum	Petunia
Ageratum	Phlox, Annual
Bachelor Button	Poppy, California
Cosmos	Portulaca
Dianthus	Scabiosa
Dimorphotheca	Zinnia
Gaillardia	Four O'Clock
Marigold	Salvia

Perennials for hot locations are less plentiful, but you can usually do well with **Babysbreath**, **Perennial Asters**, **Sedum Acre**, **Statice**, and **Blanket Flower** (Gaillardia).

**Flowers for Poor Soil**

Of course, the right answer to poor soil conditions is **"Improve the soil!"** But if you can't or don't want to do this, you can usually get fairly good results in poor soil with these:

Amaranthus	Marigold
Balsam	Nasturtium
California Poppy	Petunia
Calliopsis	Portulaca
Gaillardia	Sweet Sultan

**These Need Successive Sowings**

Some of the annuals which come into bloom quickly, keep blooming for only a little while. If you want them in bloom through the season, make several successive sowings at two to four week intervals. Flowers in this class include:

Calliopsis	Gypsophila
Candytuft	Larkspur
Cornflower	Mignonette
Forget-me-not	Poppy

**For Late Gardens**

Even in mid-summer, there's still time to start some of the annuals from seed and have lots of bloom before the season is over. The soil must be well prepared and fertilized. The proper flowers for such late planting are:

Babysbreath	Cosmos
Calendula	Portulaca
Cornflower	Shirley Poppy

**Petunias** and **Snapdragon** seedlings may be started late, too.

**Most Dependable Annuals**

As every experienced gardener knows, some annual flowers succeed under exactly the same growing conditions which let other flowers fail. There is quite a list of annuals which are highly dependable. Given proper soil and care, these "old reliables" are practically sure to produce good results:

Balsam	Marigold
Calendula	Nasturtium
California Poppy	Petunia
Calliopsis	Phlox
Cornflower	Pinks
Cosmos	Portulaca
Flowering tobacco	Salvia
Four O'clock	Scabiosa
Gaillardia	Shirley Poppy
Globe amaranth	Snow-on-the-mountain
Hollyhock	Sweet Alyssum
Larkspur	Zinnia

**Annuals for Fragrance**

We are often asked, "What annuals are really fragrant?" We recommend **Alyssum**, **Candytuft**, **Carnation**, **Mignonette**, **Gleam Nasturtiums**, **Petunia**, **Scabiosa**, **Stocks**, **Sweet Peas** and **Wallflower**.

**For Winter Bouquets**

Several flowers can be dried and used for winter decorations. The everlastings are best known but **Statice** and **Gypsophila** are also fine. **Celosia** will last a long time but is not as showy as the others.



SWEET PEA  
Spencer, Rose Pink



RUSSELL LUPINES



PETUNIA  
Rose King



NASTURTIUMS  
Gleam Hybrids



PANSY  
Geneva Giant



### Window Boxes

There's nothing finer than window and porch boxes to make a house look "lived in" and gay.

The necessary boxes may be bought ready-made, or constructed at home. Redwood or cypress are the best lasting materials, but ordinary yellow pine will do nicely if well painted. Paint at least two coats, and use brass screws instead of nails to join the boards.

**Drainage** of flower boxes is important. Use about two inches of coarse gravel at the bottom. Cover this with a layer of sand, and then with good, rich soil. **Fertilizing** may be done with liquid manure, but commercial plant tablets are even better, and much easier to apply.

**Plants suitable for window boxes** are quite numerous. Among the best are **Petunias**, **Nasturtium**, **Ageratum**, **Candytuft**, **dwarf Marigold**, **Corn-flower**, **Babysbreath**, **Love-in-a-mist**, **Verbena**, **Sweet Alyssum**, **Vinca**. **English Ivy** adds a nice touch, as do various ferns.

### Good Points to Remember

**Pinch 'em off!** To make annual flower plants branch and grow more flowers, most of the plants should have the top of the stem pinched off when they are a few inches high. Remove only the end bud, about 1/4".

**Divide your perennials.** Most perennials must be divided every 3 or 4 years. Cut away all the dead roots and stalks, save the best portions, and start afresh.

**Flower bed preparation.** A good border needs a well prepared sub-soil. Dig deep and condition the subsoil just once, and you needn't bother about it again for many years. For this happy situation, break up heavy subsoil with sand, peat moss, humus, or lime. Top this off with fine loam. The double-dug bed will be higher than before, but will soon settle.

### Formula for Pansy Growing

Pansies are not annuals but near-hardy perennials that need special culture. Cold frames, with glass sash and mats for winter protection are essential. Soil should be rich: up to one-third of soil can be well-rotted manure or sifted compost. Sow seed in August. Protect frame with shades made by tacking muslin or cheese cloth over window screens. Thin plants to stand 4" x 4". After first frosts, cover with glass and mats, and allow to freeze slowly. Remove mats in early spring and allow sun to warm frame. Move plants into permanent position when in full bloom. Keep faded flowers picked; they will stop blooming if any seeds are allowed to form. Growing good Pansies from seed is the test of a real gardener.

### Two Interesting House Plants

The **Heavenly Blue Morning Glory** makes an excellent house plant for winter flowering if grown in a sunny window. Start new plants in late August, using 6" pots (they make heavy root growth). They can be trained up strings on either side of the window. **Lobelia** plants can be lifted just before frost, cut back, potted and will flower indoors in late winter.

### 5 "Where to Plant" Ideas

**Flowers in the vegetable garden.** To have plenty of cut flowers without disturbing your flower borders, plant a few rows of flowers along the edge of your vegetable garden. Or set them out between rows of early lettuce or radishes, where they can bloom after the vegetables have been used.

**Annuals in the tulip bed.** Just after the late tulips finish blooming, set out some annuals between the tulip plants. If you do this, you may safely leave the tulip bulbs in the ground for several years, or at least until they need separating.

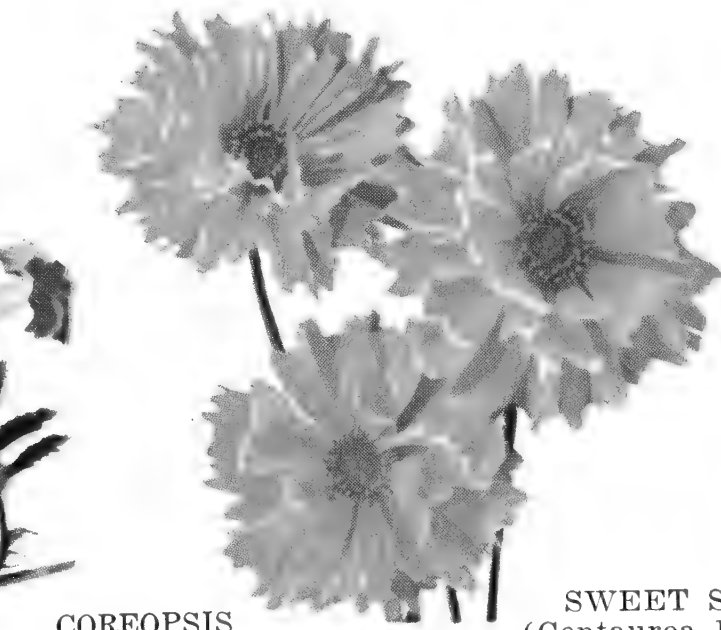
**Flowers for trellis or fence.** Vines for quick cover here are quite numerous. For brilliant color effects, plant **Cardinal Climber**, **Scarlet Runner Bean**, **Cypress Vine**, or **Japanese Morning Glory**. Less colorful are the **Cup-and-Saucer Vine**, **Hyacinth Bean**, **Balloon Vine**, and **Heavenly Blue Morning Glory**. For heavy foliage effects, gourds are good.

**For garage cover.** Sometimes it is highly desirable to screen off the bare walls of the back-yard and garage. For quick results, the taller annuals, such as cosmos, hollyhocks and sunflowers are desirable. Any of the vines named in the last paragraph above are suitable, too.

**Between drive and property line.** This narrow strip is often a very nice place for a long flower border. A low effect may be had by plantings of balcony petunia, portulaca, and sweet alyssum. Or a hedge-like effect is easy to get with **Kochia**, **Four O'clocks**, **Zinnias**, or **Marigolds**.



MARIGOLD  
Red Head



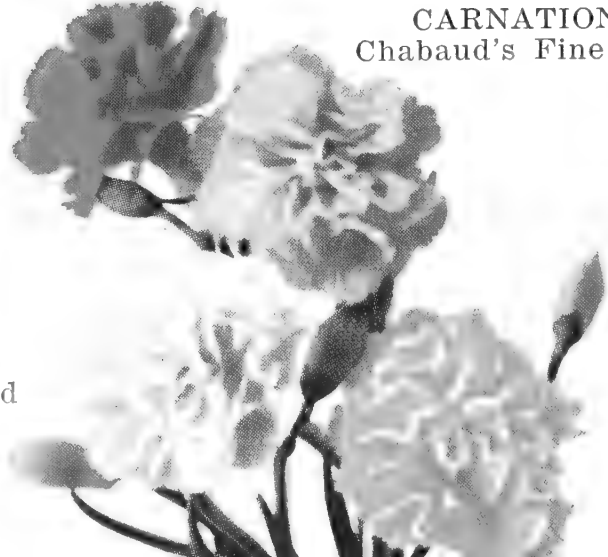
COREOPSIS  
Double Sunburst



SWEET SULTAN  
(Centaurea Imperialis)



PINKS  
(Dianthus)  
Single, Mixed



CARNATION  
Chabaud's Fine Mix



MARIGOLD  
Butterball

**CALENDULA—Pot Marigold**

(a) Culture II or IV, 1½'

**ORANGE SHAGGY**—Large orange flowers with fringed overlapping petals. Pkt. 15c.**PASTEL BEDDING MIX**—A special mixture of all the lighter shades of Calendula especially valuable in the home garden. Many lovely shades of apricot, lemon, cream, and orange are included.**CHOICE DOUBLE, MIXED**—Fine mixture of many colors and types. Good for cutting.**CANDYTUFT—Iberis**

(a) Culture III, 1'

**UMBELLATA MIXED**—Umbrella-like flower clusters. Many fine colors.**CANTERBURY BELLS**

(b) Culture VIII, 2'

**SINGLE**—Large bell-shaped flowers in many colors. Graceful plants. Mixed.**DOUBLE**—Fine double flowers in blue, pink and white shades. Mixed.**CARNATION**

(a) Culture I or VIII, 18"

**CHABAUDS DOUBLE MIXED**—Large double flowers with sweet fragrance. All colors. Flowers in six months. Pkt. 15c.**CASTOR BEAN—Ricinus**

(a) Culture III or VII, 10'

Tall, strong plant for bold effect. Large lobed bright green leaves. Fine for backgrounds.

**CHRYSANTHEMUM**

(a) Culture II or IV, 1½'

**CORONARIUM**—Showy daisy-like flowers. Rings of red, yellow on white, red or yellow flowers.**CLARKIA**

(a) Culture II or IV, 2'

**ELEGANT'S DOUBLE MIXED**—Large flowers in many gorgeous colors. Graceful plant. Does well in light shade.**COLUMBINE**

(hp) Culture VI, 3'

**MIXED**—Lovely old time perennial now in larger size and more colors. Fine for use in bouquets or among shrubs. Plants thrive in humus soil and light shade. Fine mixture of long-spurred forms in many colors.**COREOPSIS**

(hp) Culture VI, 2-3'

**DOUBLE SUNBURST**—A large, golden yellow, double, early bloom—makes a fine cut flower. Pkt. 15c.**GRANDIFLORA**—A large flowering variety with bold yellow flowers. Superb for cutting. Long blooming.**ARCTOTIS****BABY'S BREATH****COSMOS**

(a) Culture II or IV, 3-4'

**RADIANCE**—A bi-color! Beautiful, deep rose flowers have a rich crimson zone in center. Striking! Pkt. 25c.**MIXED**—Huge single flowers with wavy petals, many colors.**CYNOGLOSSUM****CYNOGLOSSUM**—Chinese Forget Me Not—Amabile blue. Sweet scented, ultra-marine blue flowers—two foot plant.**DAHLIA**

(a) Culture I or II, 24"

**UNWIN'S DWARF HYBRIDS MIXED**—Free flowering, semi-double flowers on a 24 inch plant. Pkt. 15c.**DELPHINIUM—Perennial Larkspur**

(hp) Culture VI, 5'

**GIANT PACIFIC HYBRIDS**—World famous strain of immense double flowers on tall stems. Many new colors. Pkt. 25c.**MIXED**—A fine mixture of large showy kinds in light and dark blue.**ENGLISH DAISY**

(hp) Culture VI, 8"

Low plants with colorful double daisies in early spring. For beds, edges.

**EVENING SCENTED STOCKS**

(a) Culture I or II, 15"

**MATTHIOLA BICORNIS**—Small lilac colored flowers have a strong sweet odor that perfumes a large area in evening and early morning. Grown for its fragrance.**FOUR O'CLOCK—Mirabilis**

(a) Culture III, 2'

Bushy plants covered with flowers of red, pink, white, violet, and yellow. Flowers close during bright sunshine.

**FOXGLOVE—Digitalis**

(b) Culture VIII, 3'

Tall spikes of lovely thimble-shaped flowers of pink, rose, and purple. Blooms second year.

**GAILLARDIA—Blanket Flower**

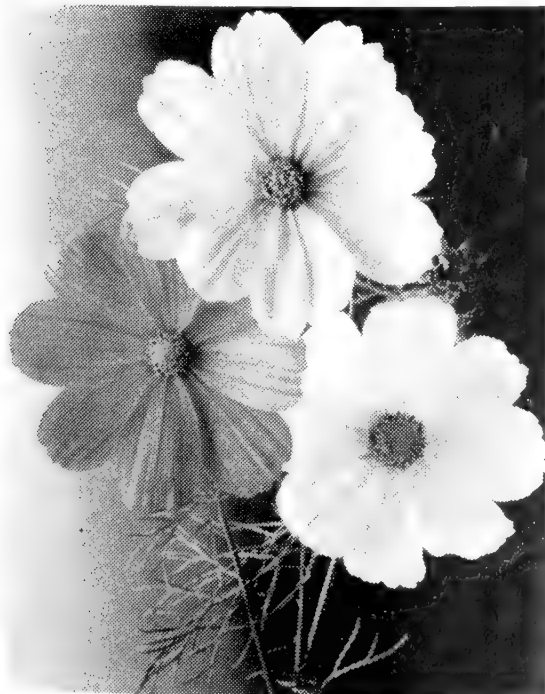
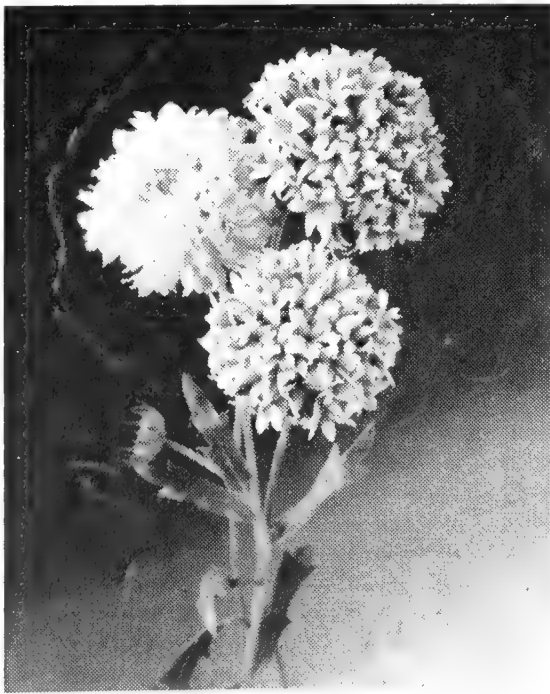
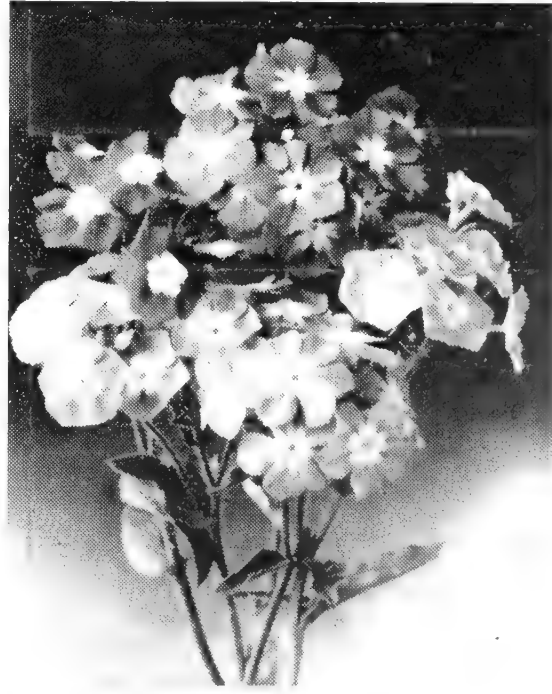
(a) Culture II, (hp) VI, 2'

**SINGLE, MIXED (P)**—Large daisy flowers in many brilliant colors.**DOUBLE, MIXED (A)**—Double flowers in wide range of showy colors.**GERANIUM**

(p) Culture I or V, 2'

**ZONALE**—Lovely geraniums that will bloom the first year if started early. Very interesting as there is a great variation in the color of the flowers. Pkt. 25c.**COLUMBINE**



**GEUM***(hp) Culture VI, 1½'***MIXED**—Glowing scarlet and orange flowers. Bright green attractive foliage. Fine for edging.**GODETIA—Satin Flower***(a) Culture I or II, 2"***DOUBLE, MIXED**—Azalea-like flowers of many colors on bushy plants.**GOLDEN ALYSSUM***(hp) Culture VI, 4-6"***SAXATILE (hp)**—Dwarf perennial. Golden flowers in earliest spring.**GOURDS, ORNAMENTAL***(a) Culture III, 12'***MIXED**—Large and small kinds that will be useful for drying and all sorts of novelty items.**HOLLYHOCKS***(a) Culture II, 6-7'***LILLY'S MIXED COLORS**—All colors in a fine mixture for tall effect. Many different shapes of flowers too, such as fringed, crinkled, etc.**INDIAN SPRING**—Large semi-double flowers in a clear bright rose splashed with carmine. Very striking and lovely.**LADY SLIPPER—Balsam***(a) Culture II, 1½-2'***MIXED**—Double Camellia-like flowers all summer on bushy plants.**LARKSPUR—Annual Delphinium***(a) Culture II or IV, 3'***TALL ROCKET**—Tall spikes of many crowded flowers. Brilliant showy, colors, ideal for cutting, or garden show.**LOBELIA***(a) Culture I or V, 4"***EMPEROR WILLIAM**—Compact little plants with showy gentian blue white eyed flowers. Ideal for borders or pots.**SAPPHIRE**—A trailing lobelia especially suited for window boxes, along terrace walls and similar places. Flowers are deep blue with a white eye. Blooms profusely.**LUPINE***(hp) Culture III or VII, 3'***RUSSELL MIXED**—Finest of all the lupines! Brilliant colors in long, strong spikes of pea-shaped flowers. Pkt. 25c.**MARIGOLDS***(a) Culture I or II, ½-3'***BUTTERBALL**—1942 All America Award. Small canary-yellow blossoms with crested centers. Pkt. 15c.**COSMOS****GAILLARDIA****PHLOX****DWARF DOUBLE FRENCH MIXED**—Compact plants with flowers in yellow, orange, mahogany, and bronze.**YELLOWSTONE, MISSION GIANT**—Golden-yellow, large double, chrysanthemum-like flowers. Pkt. 15c.**RED HEAD**—1948 All America Award. Dwarf Single. Crested center of erect gold petals with maroon outer petals. Pkt. 25c.**SUNSET GIANTS, GIGANTEA**—Huge dahlia-flowered strain. Shades of lemon and gold.**GUINEA GOLD**—Large round flowers in a rich gold. Very popular.**MEXICAN FIREBUSH***(a) Culture III, 2½'*

Compact pyramid. Needs no trimming. Bright green foliage makes neat, quick hedges. Turns bright red in fall.

**MIGNONETTE—Reseda***(a) Culture III, 1'*

Low grower with tiny, white blooms that are very sweet scented. Grown especially for fragrance.

**MOONFLOWER***(a) Culture VII, 15-20'***EVENING GLORY**—A large growing climber with dense foliage and large trumpet-like flowers of lavender blue. Flowers open during the evening and close soon after dawn.**MORNING GLORY—Ipomea***(a) Culture III, V, or VII, 13'***CORNELL**—Cornelian red with white borders. Pkt. 15c.**HEAVENLY BLUE**—Sky-blue flowers on a tall, neat climber. Flowers close in bright sun. Exquisite on fences. Pkt. 15c.**JAPANESE GIANTS**—These seeds will produce large vines covered with large morning glories in an amazing variety of colors. Very showy and different.**SCARLETT O'HARA**—Large velvety scarlet flowers. Very showy.**NASTURTIUM***(a) Culture II or V***SINGLE MIXED**—Complete mixture of all colors in the well-known single type.**TALL SINGLE MIXED**—The old single type in the tall growers. All colors.**GOLDEN GLEAM**—Large golden flowers. Double and fragrant.**DOUBLE MIXED GLEAM HYBRIDS**—All the striking colors of the famous Gleam strain. Large double flowers—tall strong plants—many beautiful colors.**NEMOPHILA—Baby Blue Eyes***(a) Culture II, 6"*

Many cup-shaped sky-blue flowers on low spreading plant.

# HOME GARDENING GUIDE

## HOW TO GROW BETTER, BIGGER ROSES

Give roses the best location possible. They want: well-drained soil; at least a half-day's full sunlight (morning sunlight is not especially desirable); shelter and protection from prevailing winds. They should not be too close to large trees. Prepare the rose beds in advance, if possible. Where the soil is good garden loam which has been under cultivation for some time and is well drained, so there is no standing moisture, the preparation is easy. Dig to twice the depth of a spade—about 24 inches. Mix thoroughly generous quantities of Manure and Bonemeal and two tablespoonfuls of Sulphate of Potash with soil in bottom of hole. Let stand and settle.

### Summer Care

Giving your Roses close attention throughout the summer months can add a great deal to the enjoyment you get from them. Here are some of the things to be considered in growing the full-blooming beauties that are the pride of every gardener.

**CULTIVATION**—Throughout the summer, until September, roses should be cultivated regularly to destroy weeds and aerate the soil. The soil should never be allowed to bake. One method used to keep

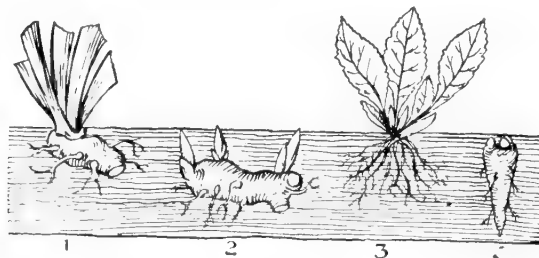
a crust from forming is the application of a peat or terra-lite mulch. This also helps conserve moisture. After a heavy rain, it is advisable to hoe and rake rose beds just as soon as the soil has dried sufficiently.

**WATERING**—Any watering should be thorough. Sprinkling is actually bad for your roses since it brings feeding roots to the surface and causes burning. Water early in the morning, preferably. This way, foliage will be dry by nightfall, lessening the danger from mildew, a disease which likes the combination of cool nights and wet foliage. During extremely hot periods, it is a good idea to hose plants with a strong stream of water several times during the day.

**DISBUDDING**—Beautiful flowers for cutting may be had by disbudding. The central bud of a cluster is usually the best and by allowing only this bud to develop, you can enhance its beauty. This applies to Hybrid Teas and Hybrid Perpetuals. Polyanthas and landscape Roses need no disbudding. In cutting flowers, it is best to cut in early morning before petals start to unfold. Cut the stems two buds above the point where they branch from the main stem.

### How to Plant Perennials

The soil should be well worked and free of big lumps and air pockets. The average planting distance for perennials is one foot apart. Vigorous growers like peonies and mallows require as much as three feet apart. No. 1 plants (see below), such as iris, should be planted with the main root just below the surface of the ground. No. 2 plants, such as peonies, should be planted with the tips of the buds at or just below the surface of the ground. No. 3 plants, in which the leaves spring from the crown, should be planted with this crown on the level of the dirt line. No. 4 plants, such as hollyhocks, should be planted with the root straight down and the bud just below the surface of the dirt. Spread roots out naturally. Bring the soil in contact with all roots and press firmly. If the plants are watered, water the roots and not the tops.



MARIGOLD,  
Mission Giant Yellowstone

### How to Plant Shrubs

Keep roots covered with damp sack or something similar and do not let them become dry. Spade ground deeply, digging large holes with perpendicular sides. Cut off broken or bruised roots and cut back top one-third to one-half. Plant slightly deeper than they stood in nursery. Tamp soil firmly around roots and fill top of hole with several inches of loose earth to serve as mulch.

### How to Prune and Plant Trees

With shade trees having a heavy top, at least one-third of the top should be removed. Prune to avoid crowding branches. Cut out some of the small branches, shorten back the side branches, but do not cut off the leader or main stem. Try to get well developed head, strong leader and branches at wide, not close, angles. Cut off all broken roots. In choosing trees for the home grounds, study the house and the effect you want to produce. If the house appears tall or seems to stick up too much in the air, plant trees that will tower and spread over it, or trees that will shoot up tall and narrow and make it appear lower in contrast. If it is a low house it can be made to hug the ground or to appear higher by a judicious selection of trees.

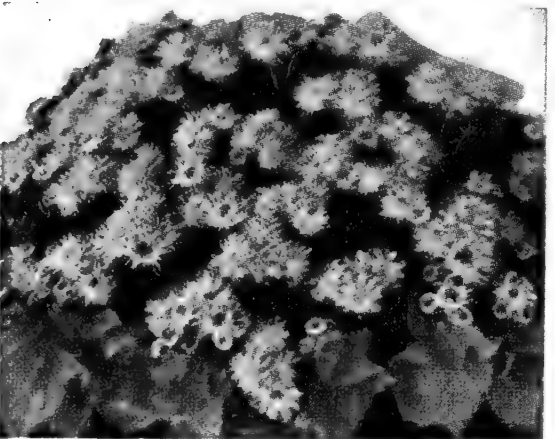
PETUNIA, Radiance



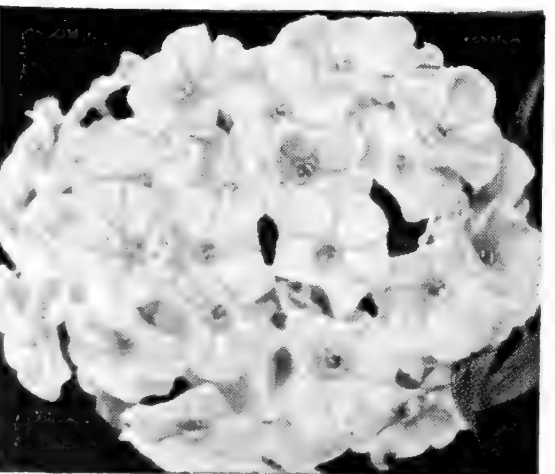
Sunflower  
(HELIANTHUS) Sun Gold



ZINNIA, Dahlia Fl. Crimson

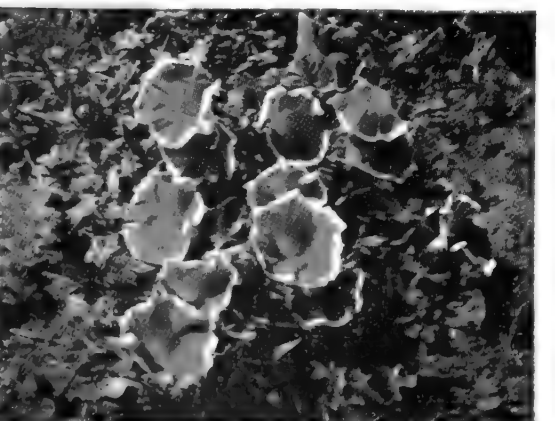


AGERATUM, Little Dorrit, Blue



PHLOX, Drummond

MORNING GLORY, Cornell





# HOW TO GROW

All flowers listed in  
this Garden Annual

The numbers, I to VIII, found with every flower listing refer to the following culture notes which give directions for growing all of the flowers we list.

One of the important problems in the garden is that of maintaining a continuous show of bloom. This calls for the use of several different types of annuals, such as those that must be planted early to grow in cool weather (**Culture IV**) and those which bloom later in summer heat (**Culture I and II**). If some of the cool-weather annuals from **Group IV** are sown in mid-summer and kept well watered, they will grow slowly until the cooler days of fall start them into more active growth. These will produce late flowers. Quick-growing annuals from **Group II** may also be sown at intervals for a succession of bloom during the summer.

One way to lengthen the blooming period of annuals is to cut off all flowers as soon as they fade. Annuals complete their life span when seed is formed and frequently stop flowering as soon as the seed ripens. By preventing the seed from forming through removal of all old flowers, the plants are kept growing and blooming.

## Culture I

These flowers need a long season and must be started indoors if a full blooming period is to be had. If early bloom is not important, they will bloom later in the summer when sown directly in the garden. Some gardeners sow both ways to obtain a succession of flowers. When starting seedlings indoors, select a place with plenty of light. North or shaded windows may be too dark for best results. Cold frames are generally very good. The seed is planted in small boxes (or flat) that have good drainage and will fit the space you are going to use. Fill them with a mixture of  $\frac{1}{3}$  good soil,  $\frac{1}{3}$  sand and  $\frac{1}{3}$  humus such as peat. Press the soil down firmly and make small rows with the edge of a ruler or lath and slowly shake the seed from the packet into the rows. Sift a light covering of the soil mixture over the seed and moisten with a fine spray. Keep soil moist until the seeds have sprouted. Very fine seed such as that of petunias should be dusted carefully onto a smooth soil surface and covered with a pane of glass. Shade it with newspaper until the seeds sprout. These are best watered by setting the flat in a pan of water until the soil has become thoroughly dampened all the way through. When the seedlings have formed the second true leaves, transplant them into other flats so the plants are about  $2\frac{1}{2}$  inches apart. This will give them room to grow to good size before being set out. Expose gradually to outside conditions and plant outside after the weather is warm and settled. When sown directly outdoors, follow directions under **Culture II**.

## Culture II

These are the quicker-growing annuals that can be sown directly in the garden and will bloom in time to make a good display for

most of the summer. If wanted especially early, they should be started as directed under **Culture I**. Some flower seedlings are rather delicate. Extra care in preparing the seed bed will pay dividends in better plants.

Prepare soil with a liberal amount of mixed fertilizer and organic matter and dig it in. Rake the surface until it is smooth and pulverized. Sow the seed at a depth equal to three times the diameter of the seed. Fine seed can be spread on the surface and pressed in without covering.

Keep soil moist by light spraying until the seedlings have formed the first true leaves. When they are large enough to handle, they may be transplanted to other parts of the garden.

## Culture III

These flowers do not transplant well. They should be planted where they are to bloom.

Sow as soon as the weather begins to warm in the spring. **Otherwise the culture is the same as II.** Sow seed thinly or remove the smaller plants after they are up. These can be handled as pot-grown plants as in **Culture VII**.

## Culture IV

These flowers are unusually hardy annuals that can withstand very cool weather. They are often sown late in fall so they can start growing the first warm days of spring. If not sown in fall, they should be planted as early in the spring as possible. Fall sowing gets the seeding job out of the way before the spring rush.

## Culture V

These flowers, while garden subjects, are also useful for winter-flowering house plants. **For garden use, handle as in Culture II.** For winter flowering indoors, plant fairly late in the season and transplant

**PETUNIA—Fire Chief, 1950 Gold Medal Winner.** *The first flower development to win the gold medal in eleven years!* This "natural color" reproduction cannot do justice to the real life, fiery-red brilliance and beauty of Fire Chief. A wonderful addition to your garden. Be sure to ask us about it.



into small pots as soon as they are large enough. Keep moving them to larger pots as roots fill the soil until they are finally in six-inch pots. Annuals in pots should have at least six hours of direct sunlight daily if they are to flower.

## Culture VI

Perennials can be seeded at almost any time of the year. Best periods are early in the spring or in early summer when the rush of spring work is over. A cold frame or sheltered bed which can be shaded from the direct sun is best. Prepare soil thoroughly with plenty of organic matter. A loose, friable soil will produce a thick mat of roots so that the seedlings will transplant more easily. Perennial seedlings are rather weak growers needing extra care. In covering the drills in which the seeds are sown, use either pure, clean sand or a mixture of half sand and half peat. This prevents packing of the soil over the seeds. Always water with a fine spray.

As soon as the second leaves form, seedlings may be transplanted into their permanent position. Or, if more convenient, they may be left in the seed-bed until the following spring. Under this culture, only a few species will bloom the first year and they will not produce normal flowers until the following year. Planting earlier does increase the chances for flowers the first year. But, if it is more convenient, **Culture I may be used.**

## Culture VII

These varieties need a longer growing season than can be given them outdoors. And because they do not transplant well, they must be started in pots and set out without disturbing the roots. **Otherwise Culture is the same as I.** The use of plant bands allows you to set the seedlings out without disturbing the roots. The bands soon rot away and the seedlings will grow as though started in the garden.

If clay pots are used, the excessive drying can be avoided by placing the pots in a flat and filling the space between them with damp peat or vermiculite. Be sure to keep this material moist or it will draw moisture from the pots.

## Culture VIII

These flowers are biennials. They make a leafy growth the first year but do not flower. The leafy growth of the first year forms food for blooming the following year. The flowers appear the second year and then the plant dies.

This means that a continuous show from biennials must be provided by starting new plants every year to replace those that are flowering. Biennials are handled in the same way as perennials except that they are started early in the spring to allow the plant to store as much food as possible for the next year's bloom.

Many gardeners start biennials in the vegetable garden or special starting bed and then transplant the ones needed to the flower garden the following spring. During the winter, biennials should be given the same treatment as perennials.

**PANSY***(hp) Culture I or VI, 8"*

**GENEVA GIANTS**—A selection of the famous Swiss Giants. Flowers are larger and in a wider range of showy colors. Useful for borders, beds, edging, and cutting. Prefers humus soil and partial shade. Pkt. 25c.

**PETUNIA***(a) Culture I or IV, 12"*

**FIRE CHIEF**—Brilliant red. All American Gold Medal Winner for 1950. The first flower to win this award in eleven years! Pkt. 25c.

**SINGLE MIXED**—A mixture of choice varieties in a wide range of colors. Free-blooming. Ideal for beds and borders.

**GIANTS OF CALIFORNIA MIXED**—A balanced mixture of all colors in large flowering size. Blooms are immense and exquisitely ruffled and fringed. Colors are rich. Pkt. 25c.

**ALBA**—A clear white single variety for bedding.

**BLUE BEE**—Rich blue violet color. Single flowers for bedding.

**RADIANCE**—Rich rose with salmon sheen. Throat of yellow gold. Pkt. 15c.

**ROSE KING**—Beautiful rose pink that is brilliant in its effect. Single flowers for bedding.

**ALL DOUBLE AMERICA**—Lovely carnation-like flowers on foot high plants. A glorious shade of rose pink. Long blooming and free flowering. Pkt. 50c.

**PHLOX***(a) Culture II, 8-12"*

**DRUMMONDI GRANDIFORA**—Lovely clusters of showy flowers on low plants from early spring on. Easily grown. Many splendid colors not found in perennial varieties.

**PINKS—Dianthus***(a) Culture I or VIII, 1'*

**SINGLE MIXED**—Fine mixture of colorful, sweet-scented, garden pinks. Fine for bouquets.

**HEDDENSIS**—New tetraploid hybrids! Larger flowers, longer stems, better growth. Many fine colors. Pkt. 15c.

**POPPY***(a) Culture III, IV, (hp) VI, 1½-3'*

**ICELAND MIXED**—Excellent perennial for borders and rock gardens. Large colorful flowers from attractive tufts of ferny foliage.

**SHIRLEY, MIXED**—The easily grown, lovely annual poppy. Many bright colors. Grows easily and self-sows.

**CALIFORNIA POPPY, MIXED**—Large single poppy-like flowers in many showy colors. Fern-like leaves.

**CALIFORNIA POPPY, YELLOW**—The famous golden poppy of the California hills. Easily grown.

**PORTULACA, Moss Rose***(a) Culture II, 6"*

Low creeping plant with large brilliant rose-like flowers in a wide range of bright colors. Thrives in light soil and sunny situation. Excellent for covering bare ground in dry situations.

**PRIMROSE***(hp) Culture VI, 6-12"*

**POLYANTHUS GIANT MIXED**—Among the loveliest of spring flowering plants. The graceful clusters of dainty blossoms are gems for bedding and for potting. Seed has a tendency to germinate slowly and unevenly. Pkt. 25c.

**PYRETHRUM***(hp) Culture VI, 24-30"*

**PAINTED DAISY**—Hardy plants with ferny foliage and daisy-like flowers in many shades of white, pink, and rose. Very attractive in the hardy borders. Pkt. 25c.

**SALPIGLOSSIS—Painted Tongue***(a) Culture III, 30"*

**MIXED**—Large petunia-like flowers of rich velvety colors, usually veined with gold. Striking!

**SALVIA—Scarlet Sage***(a) Culture I, 2-3'*

The well-known Scarlet Sage that is a blaze of vivid scarlet in summer. Free bloomer of medium height. Pkt. 25c.

**SCABIOSA—Mourning Bride, Pincushion Flower***(a) Culture III or IV, 2'*

**BLUE MOON**—Large double flowers of deep lavender blue, wiry stems. Pkt. 15c.

**MIXED**—All the lovely colors of the Scabiosa group. Very showy.

**SHASTA DAISY***(hp) Culture VI, 12"*

**ALASKA**—Large white flowers for a long blooming season. Hardy and dependable. Pkt. 15c.

**SCARLET FLAX—Linum***(a) Culture III, (hp) VI, 1-2'*

**SCARLET (a)**—Bright red flowers in a constant succession all summer. Fine for edging.

**SCARLET RUNNER BEAN***(a) Culture II, 10-12'*

A rapid growing vine that has masses of bright scarlet flowers followed by long green pods that may be used as green shell beans. Gives a brilliant screen effect and adds to the vegetable variety too.

**SCATTER GARDEN***(a) Culture II*

A mixture of choice varieties to give a succession of fine blooms for the whole season. Sure to delight you and introduce you to many new flowers. Pkt. 25c.

**SCHIZANTHUS—Butterfly-Flower***(a) Culture II or IV, 1½'*

**MIXED**—Small flowers shaped like multi-colored butterflies. Delicate cut leaves. Free flowering.

**SIBERIAN WALLFLOWER***(hp) Culture I, II or VI, 16"*

**CHEIRANTHUS**—Dazzling spikes of bright orange flowers. Excellent for rock gardens and massing beds. Best to sow more every year as the plants tend to die out from over-blooming.

**SNAPDRAGON, Antirrhinum***(hp) Culture I, II, IV, or VI, 12-30"*

**BEDDING MIXED**—A mixture of many colors. Plants are short and branching, ideal for massing in beds. Good for cutting.

**RUSTPROOF MIXED**—Ideal for cutting. The long strong stems make beautiful floral arrangements. This mixture contains some of the most spectacular colors in the Snapdragons. Give rich soil, and enjoy profuse blooms.

**STOCKS—Gilliflower****TEN WEEKS DOUBLE***(a) Culture I or IV, 1-2'*

**MIXED**—Excellent double flowers on tall stems. Many bright colors.

**SWEET ALYSSUM***(a) Culture II, 4-6"*

**LITTLE GEM**—A fine little plant for edging. Tiny snow white flowers cover the plant for weeks. Easily grown. Blooms in a few weeks from seed.

**STRAWFLOWER, Helichrysum***(a) Culture II, 4'*

A fine flower for drying for winter use. Plants branch freely and have lovely bright colored flowers with straw textured flowers which dry naturally and last indefinitely.

**SUNFLOWER, Helianthus***(a) Culture II, 6'*

**SUNGOLD**—Large double flowers of a brilliant golden yellow. Pkt. 15c.

**MAMMOTH RUSSIAN**—Huge, golden pads—grow to height of 8 to 10 feet.



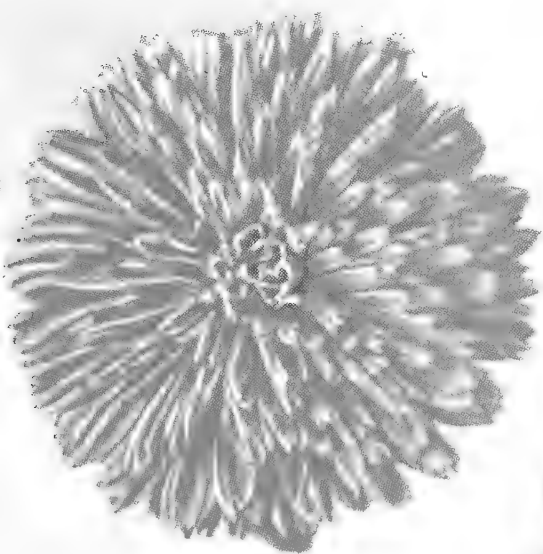
## HANDY PLANTING GUIDE FOR FLOWER GARDEN PLANNERS

KEY—For classification of flowers by purpose, location, etc., see the second column below. The meaning of the key letters in this column is as follows:

A—For dry, hot locations  
B—For a succession of blooms  
C—For shady locations  
D—For poor soil  
E—For edging  
F—For the rock garden.

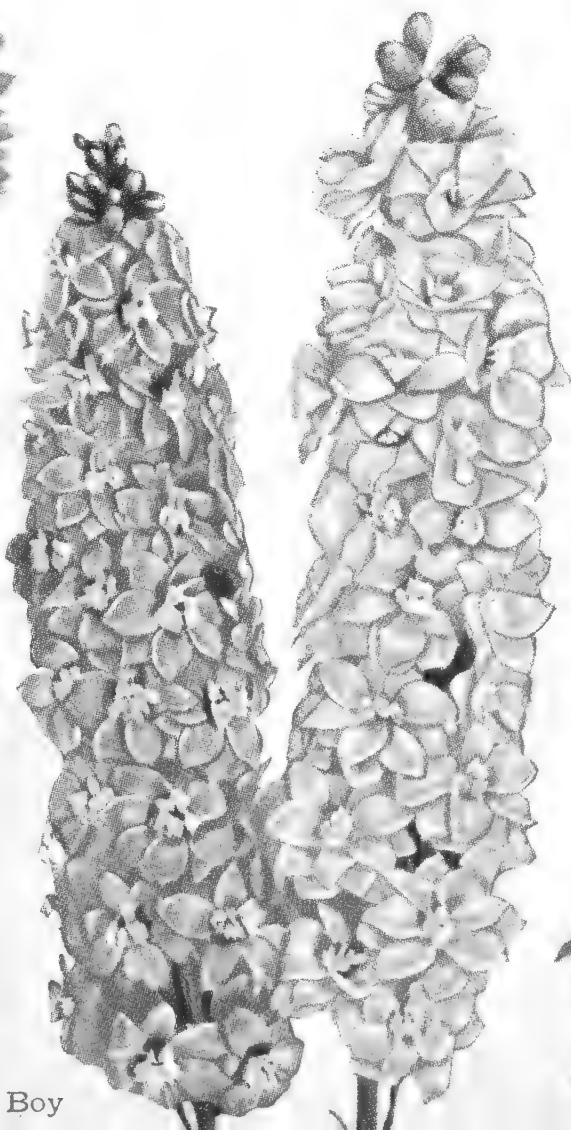
G—For their foliage  
H—Everlasting for winter bouquets  
I—For their fragrance  
J—For porch or window boxes  
K—Climbing Vines  
L—For backgrounds.

	Height (Inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant
<b>Ageratum</b>	4-12	E F J	5-10	10 Wks.	bushy
<b>Alyssum, Sweet</b>	2-12	B C D E F I J	5-10	6 Wks.	spreading
<b>Antirrhinum</b>	12-60	C I L	20-25	3-4 Mos.	bushy
<b>Aquilegia</b>	18-36	C E F	15	3 Mos.	branchy
<b>Balsam</b>	14-20	A E	10-12	6 Mos.	erect
<b>Calendula</b>	12-36	D	10-14	12-14 Wks.	bushy
<b>Campanula</b>	18-24	F	8-15	10-12 Wks.	bushy
<b>Candytuft</b>	6-18	B F I	5-10	8-10 Wks.	bushy
<b>Centaurea</b>	18-36	A B C D E I J	5-20	3-4 Mos.	erect
<b>Chrysanthemum</b>	24-36	A E	5-20	8-10 Wks.	bushy
<b>Celosia</b>	12-36	D E H	20-25	10 Wks.	bushy
<b>Cosmos</b>	36-60	A	5-15	10-12 Wks.	bushy
<b>Coreopsis</b>	18-36	A B D	10-20	4-5 Mos.	bushy
<b>Dahlia, Dwarf</b>	14	F	10	3-4 Mos.	bushy
<b>Delphinium</b>	36-72	L	15-21	3-4 Mos.	tall
<b>Digitalis</b>	30-48	F	10-20	3-4 Mos.	erect
<b>Dianthus</b>	4-15	F I	5-10	12 Wks.	bushy
<b>Eschscholtzia</b>	10-12	C D F	5-12	12-15 Wks.	bushy
<b>Four O'Clock</b>	24-30	A D		5-10	3-4 Mos. bushy
<b>Gaillardia</b>	18-30	D		15-20	2-3 Mos. bushy
<b>Godetia</b>	12-24	C D		15-20	2 Mos. erect
<b>Gypsophila</b>	18-36	B H		15-20	8-10 Wks. branching
<b>Helichrysum</b>	24-36	H		5-10	3 Mos. bushy
<b>Hollyhock</b>	48-84	L		5-20	10 Wks. slender
<b>Kochia</b>	30-36	A B		15-18	Foliage bushy
<b>Larkspur, Annual</b>	30-72	L		15-20	10-12 Wks. tall
<b>Lathyrus</b>	60-72	I K		25-40	2-3 Mos. vine
<b>Lobelia</b>	4-8	E J		10	10-12 Wks. bushy
<b>Marigold</b>	8-36	B J		5-8	6-8 Wks. bushy
<b>Mignonette</b>	10-12	B I			3-4 Mos. erect
<b>Moon Flower</b>	12 ft. or more	I K		5-8	4-5 Mos. vine
<b>Morning Glory</b>	12 ft. or more	A K		5-8	3-4 Mos. vine
<b>Nasturtium</b>	12-36	D E F K		8-15	2-3 Mos. bush. vine
<b>Nigella</b>	10-18	B F		10-15	10-12 Wks. bushy
<b>Nicotiana</b>	30-48	I		20-25	10-12 Wks. branchy
<b>Pansy</b>	4-8	C E F		10-15	10-12 Wks. clump
<b>Petunia</b>	10-24	D E F J		18-20	10-12 Wks. bushy
<b>Phlox</b>	10-18	A B C F I J		20-25	8-10 Wks. bushy
<b>Poppy</b>	18-36	B		20	12-15 Wks. erect
<b>Portulaca</b>	4-6	A D E F J		18-20	6 Wks. spready
<b>Salvia</b>	12-42	A		15-25	3-4 Mos. bushy
<b>Scabiosa</b>	18-30	I		18-20	2-3 Mos. bushy
<b>Stocks</b>	12-24	I		5-15	12-14 Wks. bushy
<b>Schizanthus</b>	18-36	C E		20-25	6-8 Wks. bushy
<b>Sweet Pea</b>	36 or more	K		15-20	10-12 Wks. vine
<b>Sweet William</b>	12-24	F		10	12 Wks. bushy
<b>Verbena</b>	6-12	E F J		8-10	12 Wks. spready
<b>Wallflower</b>	12-18	I		5-12	2-3 Mos. bushy
<b>Zinnia</b>	12-36	A F		5-10	6-8 Wks. bushy



CALENDULA, Orange Shaggy

DELPHINIUM, Pacific Hybrids

GAILLARDIA,  
Double Mixed

BACHELOR'S BUTTONS, Blue Boy

PINKS  
(Dianthus)  
HEDDENSIS,  
Tetra Mixed

## SWEET PEAS, Mixed

(a) Culture III, 3-5'

**ORCHID FLOWERED SPENCER MIXED**—A complete blend of all colors in the popular Spencer strain. For those who want all colors. In addition to the 10c Pkt. we offer a 1 oz. packet for 25c—one of the outstanding values in our catalog!

**SPENCER MIXED**—A choice blend of colors. Many new and unusual colors. Fine for garden or cutting. ½ ounce pkt. 15c.

**FLUFFY RUFFLED MIXED**—A colorful blend of a new strain with ruffled and wavy petals. Has an appearance of many double flowers. A lovely and distinct type of sweet pea for garden or bouquets.

**CUTHBERTSON, MIXED**—A new strain originated to flower all summer long. Heat resistant. Large flowers in many showy colors. An outstanding development. Pkt. 25c.

## SWEET PEAS, Selected Colors

These are the best of many varieties tested by us. Each is the leader in its color. These are the famous Orchid Flowering Spencer type.

**AMBITION**—A large flowered, fragrant variety with clear deep lilac-lavender flowers. A favorite.

**DAMASK ROSE**—Numerous exhibition type blooms and heavy foliage make this outstanding. The color is a glorious cerise-rose.

**GLENEAGLES**—Long stemmed flowers of a beautiful silvery blue.

**GIGANTIC**—The outstanding white Sweet Pea of today. A free bloomer of large, pure white flowers—black seeded.

**LOCH LOMOND**—A new variety in a striking shade of mahogany.

**PICTURE**—A beautiful flower in a dainty cream pink shading to apricot.

**PIRATE GOLD**—A new variety in a fine rich deep orange color.

**RED BOY**—The large beautiful flowers borne on sturdy stems are a deep rich crimson.

**SHIRLEY TEMPLE**—An early blooming large flowered variety. Flowers are a beautiful clear pink.

**SMILES**—A vigorous grower with waved blooms of a salmon-shrimp pink.

**WELCOME**—The large blooms are a brilliant orange scarlet.

**WHAT JOY**—Heavily waved blooms in a lovely primrose with creamy shadings.

## SWEET SULTAN

(a) Culture II or IV, 2½'

**MIXED**—Lovely colorful thistle shaped flowers. Easily grown.

## SWEET WILLIAM—*Dianthus Barbatu*

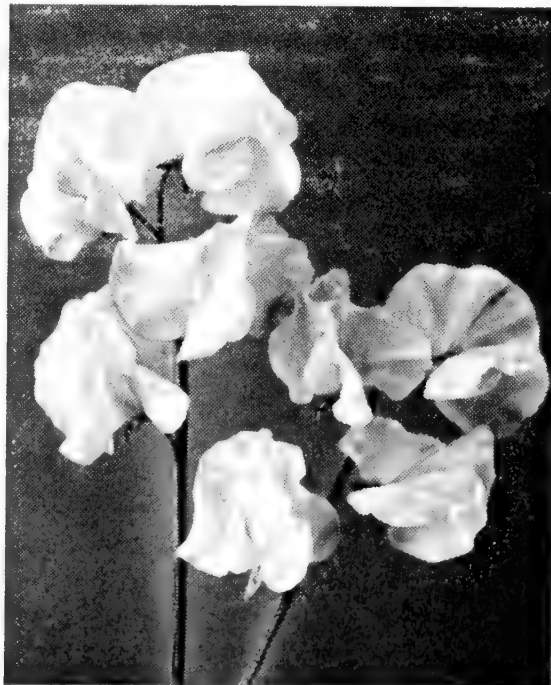
(hp) Culture VI, 1½-2'

**SINGLE**—Lovely single pinks in large flat clusters. Fine for cutting.

ZINNIA, FANTASY



SWEET PEAS, SPENCER



ZINNIA, GIANT



## VERBENA

(a) Culture I, 8"

**MIXED**—Huge flower clusters, all colors. Ideal for beds and borders.

## VIOLA

(hp) Culture VI, 8"

**CORNUTA**—Sometimes called tufted pansies. Flowers are like miniature pansies. Plants have a tufted habit. Ideal for rock gardens and partially shaded spots.

## VIRGINIA STOCKS—*Malcomia*

(a) Culture II, 10"

A fine plant for edging, massing and cutting. Grows quickly and blooms for weeks. Flowers in rose and white have veins of deeper colors.

## WALLFLOWER

(a) Culture I or V, 1½"

**MIXED**—Blood-red and yellow flowers. Resemble single stocks. Early and fragrant.

## WILD FLOWER GARDEN

(a) Culture II or III, ½-3'

Old fashioned flowers in a fine mixture for all season flowering. Sow thinly and enjoy continuous flowers and delightful surprises. These are not wild flowers of the fields but a selection of garden flowers that give a "wild" garden look when planted in a border. A good way to get acquainted with some of the unusual kinds of garden flowers:

## ZINNIA

(a) Culture I or II, 12-30"

**DOUBLE GIANT MIXED**—A mixture of the largest and finest varieties in the large zinnias. Flowers are massive, well formed and brilliantly colored. Fine for the garden or for cutting.

**FANTASY MIXED**—Shaggy flowers are graceful and interesting. The medium size flowers are distinctly different and come in a range of colors from the brightest to the softest.

**EARLY WONDER FINEST MIXED**—Earliest of all Zinnias for short season locations—plants 18 to 24 inches with many 3 to 4 inch flowers on long wiry stems, having no laterals and very few leaves. Pkt. 15c.

**DAHLIA FLOWERED MIXED**—Huge flowers with broad overlapping petals. Includes a great range of vivid colors.

**DAHLIA FLOWERED CRIMSON**—A rich crimson. Best of the red shades. Mammoth blooms.

**DAHLIA FLOWERED ORIOLE**—An immense flower of orange and gold colors.

**DAHLIA FLOWERED PURPLE**—A rich deep reddish purple. Striking.

**DAHLIA FLOWERED DEEP PINK**—A fine rose pink that is a favorite.

**LILLIPUT OR POMPON MIXED**—Dwarf growers with many flowers of miniature size and shape. Free blooming. Many fine colors.



# GARDEN SUPPLIES

If you want to ENJOY your gardening . . . if you want better results with less effort . . . we can help you in many ways. We know which tools are best for each job—and just which of the new "gadgets" are really good. Our selection of garden-aids is sound, and sensible. We choose each item for just one of two reasons—improved results or saving of effort.

That's why gardeners can shop with confidence here!

**Plant and Pot Labels**—For marking plants, seed flats, etc.; four, five, six, ten and twelve inch.

**Wired Tree Labels**—3½ inch, copper, wired.

**Pea Twine**—For tying vines without bruising, very strong, 4 ply, Security Grade.

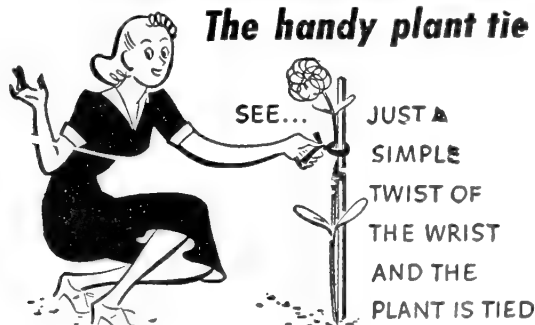
**Raffia**—Natural palm fibre for tying plants, bunching vegetables, weaving and basketry. In 1 and 2 lb. hanks.



**Swaggerette Garden Gloves**—Soft and pliable leather, durable, washable, in

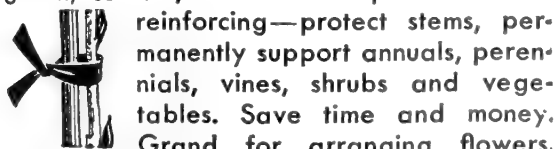
## TWIST-EMS

The handy plant tie



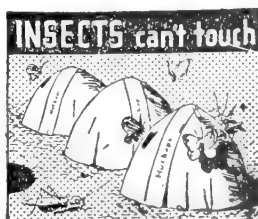
SEE... JUST A SIMPLE TWIST OF THE WRIST AND THE PLANT IS TIED

**TWIST-EMS**—strong, waterproof, dark-green, sunfast, "invisible" tapes with wire



reinforcing—protect stems, permanently support annuals, perennials, vines, shrubs and vegetables. Save time and money. Grand for arranging flowers, tying bouquets. Millions used. Buy today. Box of 125 (8 in. long)

Place **HOTKAPS** — patented paper hot-houses — over seeds or plants. Complete protection from destructive FROSTS, STORMS AND INSECTS. Ripen crops 3 weeks earlier; increase yield 18% to 51%. Maintain perfect mulch. Millions used by successful growers every season. Easy to set.



Germaco

# HOTKAPS

A GERMACO PRODUCT

sizes for men and women. Afford complete protection from dirt, scratches, bruises and stains.

**Smoothie Lawn Rake**—Rustproof aluminum, full 18 inch spread, wide flexible tines, sweeps clean without gouging or clogging. Light and sturdy, easy to handle.

**Grass Catcher**—Excellent quality duck, solid colored. Heavy aluminum bottom. Will fit mowers from 12 to 16 inches.

## "Green Thumb" Garden Gloves



They really have a green thumb and their chamois-like fabric is impregnated with a special treatment which makes them dirt-repellent and remarkably long wearing. Every gardener needs a pair of these attractively styled gloves to protect her hands. Washable, non-shrinking.

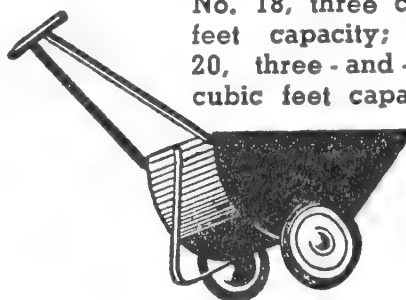
Sizes small, medium and large 79c

For a thousand odd jobs

## MASTERS HANDICART

Sturdily constructed sheet metal body, disc wheels, 10 inch rubber tires, solid steel axle. Perfectly balanced, handles easily, no lifting necessary, merely tip down to load.

Made in two sizes: No. 18, three cubic feet capacity; No. 20, three - and - half cubic feet capacity.



Why send far, far away for garden seeds or supplies—when you can get the finest, so easily, right here in your own home neighborhood?

Protects your GARDEN

## SCARE-AWAY

the modern scarecrow  
Shiny aluminum strips crackle and flash. Scares birds away. Easy to use.

Pkg. of 10 only 25c

PAT. PENDING

for Your Garden

## "Quick-ties"

Round cushion, wire center "Quick-ties" are weatherized with resin to last an entire season.

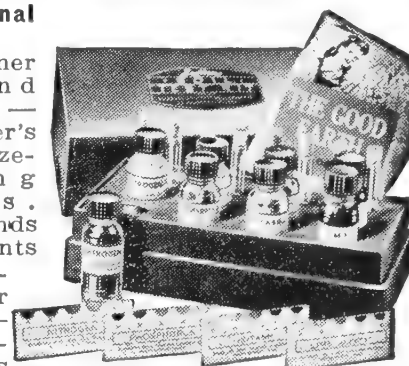
Pkg. of 80 only 25c

## TEST YOUR SOIL!

SUDBURY SOIL TEST KITS

Jr. Professional Model

Raise finer flowers and vegetables — the fancier's guide to prize-winning blooms. Shows kinds and amounts of fertilizers your soil needs—also whether lime is needed (pH) and how much. Easy-to-use . . . no knowledge of chemistry needed. Complete equipment, instructions and solutions for 50 tests for nitrogen, phosphorus, potash, acidity. 4.75 Only



Home Garden Model—Makes 20 tests. \$2.50  
Horticultural Model—Makes 150 tests. \$12.50  
DeLuxe Professional Model—Most economical to use. Lifetime hardwood chest. \$22.50



New Improved  
**CYCLONE SOWER**

Fits comfortably over shoulder. New improved model, accurate, portable seeder, broadcasts quickly and evenly, saves labor. Provided with automatic feed adjustment, which stops or starts flow of seed instantly, can be regulated to sow any amount per acre. Capacity about half bushel.

## For deep soaking

**Soil Soaker**—A simple device for deep soaking that puts water right in the soil at plant roots. Made of porous, mildew resistant canvas. Attached to a garden hose, it fills up under normal pressure and water seeps through pores. Two inches in diameter, in lengths of 12 ft., 18 ft., 30 ft. and 50 ft.



# SOIL-SOAKER



## How? When?

## PLANT FEEDING

## Where? Why?

**FOR LAWNS:** Follow these three steps. (1) Check to see that grass is dry! (2) Apply evenly 4 lbs. of Morcrop per 100 feet of area, either with a spreader or by hand. (3) Soak Morcrop into the ground immediately after applying. If water is not available merely work the Morcrop off blades of grass with back of rake. NOTE: If plant food is applied early, before growth starts steps 1 and 3 do not apply. Spring rains work the plant food into the soil. A light feeding three times a year—early Spring, early Summer and Fall—will give a thick carpet of grass.

### FLOWERS, VEGETABLES, BERRIES:

Apply Morcrop at the rate of 4 lbs. per 100 square feet of area before seeding or setting plants. For established perennials apply around plants or along both sides of row early in Spring and at six to eight week intervals.

**FOR TREES:** Make a series of holes 12 to 18 inches deep with a 2" soil auger or a pointed stick under the drip of the branches. Figure the plant food need per tree by measuring diameter four feet from the ground and allowing 3 lbs. of Morcrop per inch of diameter. Fill holes with a mixture of half Morcrop and half soil or sand.

**FOR ACID-LOVING PLANTS:** Rhododendrons, Azaleas, Camellias and similar acid-loving plants must have regular fertilizing if they are to remain healthy and produce the best, most brilliant bloom. Most fertilizers, however, do not contain the right elements for these plants or may have an abundance of lime that is highly injurious to them.

Lilly's Acid-Morcrop was designed especially for acid-soil plants.

LILLY'S ACID MORCROP is manufactured after the time tested scientific formula of Dr. Robert Gatke. It produces the exact type of acid reaction in the soil necessary for abundant, healthy growth and luxuriant flowering of our native and imported acid-soil plants.

Apply ACID MORCROP at the rate of  $\frac{1}{4}$  pound (about a full handful) per square yard. Scatter evenly in a wide band directly under the tips of the branches. Rake the surface only slightly after application because the feeding roots are close to the surface and should not be disturbed. Feed in the Spring and just after blooming.

## THE NORTHWEST'S OWN FAVORITE!

Morcrop's famous formula is the complete fertilizer with an organic base developed through hundreds of soil analyses especially for soils of this region through Lilly's more than 60 years of scientific agricultural research in the Northwest. Morcrop offsets the lack of necessary elements in the Northwest soils . . . supplies the nourishment essential to root growth; sturdy, long-lasting blooms; full-flavored vegetables and healthy, green lawns. Morcrop is the best for the Northwest because it is made right here for the Northwest! It is formulated with an organic base for lasting results in the soil.



# MORCROP

COMPLETE  
FERTILIZER



# PLANT FOODS

**Aluminum Sulphate**—A material used in creating acid soils necessary for successful culture of azaleas, rhododendrons and similar plants.

**Bone Meal**—All-purpose fertilizer, rich in the two principal plant foods—nitrogen and phosphoric acid.

**Buffalo Bone Compost**—Brought from the old Montana Indian buffalo hunting grounds. This bone meal is more readily assimilated by lawn and plants than the common bone meal by-product of packing house operation. Through the years it has decomposed to a rich brown color and therefore does not have to go through the decomposition process in the soil before it is of any plant food value.

**Sulphate of Ammonia**—A reasonably priced quick source of nitrogen. Most often used to "green" lagging lawns.

**Hydrated Lime**—Sweetens sour soil for lawns and clover. Is used as a reducer and in combination of many insecticides; for whitewash, deodorizing.

**Lime Flour**—A stronger source of calcium than Hydrated Lime, used for sweetening sour soils.

**Nitrate of Soda**—Very quick source of nitrogen. Hastens maturity of crops. Should not be applied until plants are well above ground.

**Lilly's Process Dried Sheep Manure, 100% Organic**—Both insulates and fertilizes the soil in one application. Free from weed seeds and inert matter. Unexcelled as flower, vegetable and shrub mulch and fertilizer.

**Gypsum**—A soil conditioner used to correct alkaline soil conditions.

**Morcrop Gypsum**—Also a soil conditioner to correct alkaline soil conditions but containing in addition sulfur, magnesium and calcium to feed the growing crop.

**Muriate of Potash**—A primary source of potash used to correct a potash deficiency in the soil.

**Super Phosphate**—Aids plant nutrition and assists the plant to assimilate other ingredients. An efficient fertilizer element for lettuce, truck crops, cereal crops and alfalfa.

**Flo Morcrop**—A soluble complete plant food, designed for easy efficient application of plant food elements. An excellent transplant and booster solution. In its water soluble form it goes right to the roots where it is readily assimilated by the plant.

The Northwest's own  
all-purpose fertilizer  
**MORCROP**

**HYPONEX**  
PLANT FOOD



Simply dissolve and water your plants. Grows superior plants, flowers, vegetables, indoors or out, in poorest soil—even in sand or water (Hydroponics). Clean, odorless. Complete and balanced. Won't burn. Results sure. 1 oz. makes 6 gallons.

	Retail
1 oz. pkt. (packed 72 to case).....	10c
3 oz. can (packed 36 to case).....	25c
7 oz. can (packed 24 to case).....	50c
1 lb. can (packed 12 to case).....	\$1.00
10 lb. drum, makes 1,000 gals.....	8.00
25 lb. drum, makes 2,500 gals.....	15.00
50 lb. drum, makes 5,000 gals.....	25.00
100 lb. drum, makes 10,000 gals.....	40.00

**PLANTABBS—Good for Everything That Grows**



A Rich Meal of Nitrogen, Phosphates, Potash, Plus Vitamin B<sup>1</sup>

Feed them PLANTABBS. If you don't get lovelier plants and flowers, and a greater yield of finer vegetables, you get your money back. PLANTABBS are clean, odorless, highly concentrated PLANT FOOD TABLETS which help produce sturdy stems, luxuriant leaves, strong roots and gorgeous blooms. 25c, 50c, \$1.00 and \$3.50 size boxes.

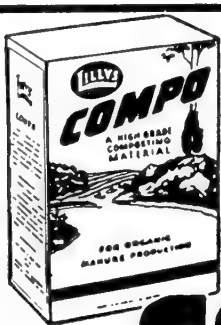


*Fulton's*  
**PLANTABBS**

PLANT FOOD TABLETS PLUS B<sup>1</sup>

Make Valuable **ORGANIC MANURE**

Compost making is easy with COMPO . . . the "self-starter" turns grass clippings, leaves, garden and kitchen refuse into rich, organic manure. Compost is rich in all the elements necessary to sturdy, healthy plant growth. Simple directions on the convenient COMPO package.



**COMPO**

5 LBS...65¢

A HIGH GRADE  
COMPOSTING MATERIAL



**SOLUBLE  
MORCROP  
WITH B<sup>1</sup>**

FLO is the new, soluble plant food. Mixes readily with water. A complete fertilizer that gets right down to the roots of grass. No bulk . . . no burning. FLO is applied with the GAT SPRAYER while you water the lawn. 10 pounds equals 100 pounds of ordinary fertilizer. Also makes an excellent transplanting and "Booster" solution.

**FLO MORCROP KIT**

10 LBS.  
FLO MORCROP  
★  
APPLICATOR JAR  
★  
GAT SPRAYER



All \$3.95  
For 3

For better  
**Sweet Peas,  
Peas, Beans**

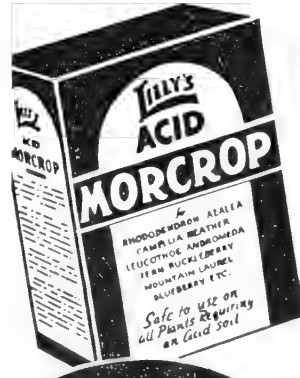
**NODOGEN**—the pre-tested inoculator, on your garden Peas or Beans, also Sweet Peas, will amaze you and your friends with the larger and more vigorous growth. Your plants will have a darker and better color, also get off to an earlier start.

Plant a small part without NODOGEN to see the tremendous difference. NODOGEN Garden Packet for Garden Peas and Beans, Sweet Peas and Lima Beans. Sufficient for 8 lbs. of seed, 15c.

**NOD-O-GEN**  
THE  
PRE-TESTED INOCULATOR

For Abundant, Colorful Blooms...  
**AZALEA, HEATHER,  
CAMELLIA, RHODODENDRON**

FEED LILLY'S  
**Acid MORCROP**

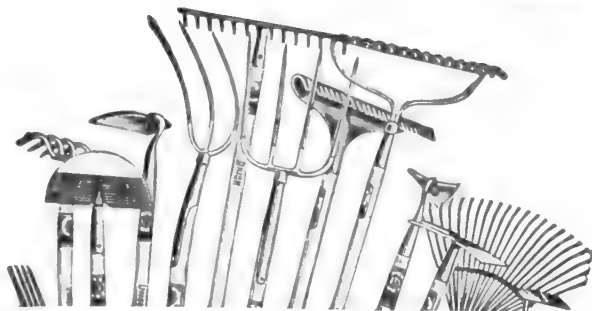


A time-tested scientific formula. Produces the exact type of acid reaction in the soil necessary to healthy growth and luxuriant flowering of native and imported acid-soil plants.



5 lbs. 70¢

# GARDEN TOOLS



Many of your garden chores can be made much easier—if you use the new, improved garden tools.

Modern designers have discovered numerous ways to improve the old tools—to make the work easier and to improve results. We have these newer tools for you, together with a good assortment of the standard designs. Next time you're in our store, be sure to look them over!

**GARDEX** *Soil-Flow*  
America's Modern Garden **TOOLS**

SINCE  
1934



## GARDEX CULTIVATOR WITH WEEDER

Width of Prongs 4 1/3"  
Width of Weeder Blade 4"  
Handle Length 4"  
Prongs are forged, hardened and at such angle to enter the soil easily. Weeder blade has a sharp cutting edge.



## 250 GARDEX BOW RAKE

14 Teeth 14" Wide  
Made from Carbon Steel  
Very sharp Teeth.  
25014-5 (14 Teeth)  
25016-5 (16 Teeth)



## 251 CURVED GARDEX TOOTH RAKE

14 Teeth 14" Wide  
Made from Carbon Steel  
Very sharp Teeth.  
25114-5 (14 Teeth)  
25116-5 (16 Teeth)



## 252 GARDEX STRAIGHT TOOTH RAKE

14 Teeth 14" Wide  
Very sharp Teeth.  
25214-5 (14 Teeth)  
25216-5 (16 Teeth)



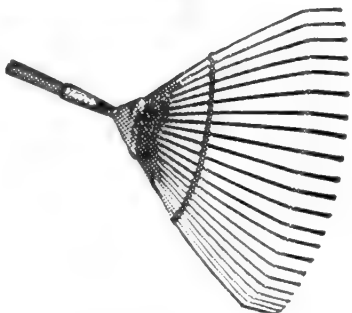
## 1207-4 1/2 GARDEX DOUBLE BOW PULL HOE

Width 7"  
Handle Length 4 1/2"  
Most suitable for weeding and cultivating onions, beets, potatoes, tobacco, cotton, etc. Cuts toughest weeds. Double bow acts as guard when hoeing around large leaf plants. Tool is light. Blade is replaceable.



## 906 1/2 GARDEX COMPETITIVE HOE

6 1/2" Wide. Sharp Carbon Steel Blade. Handle Length 4'-4 1/2'-5'.



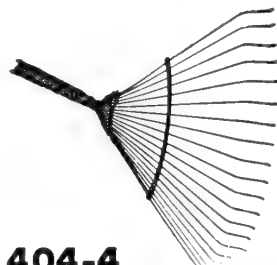
## 403-3 1/2 GARDEX LAWN SWEEP

22 Teeth, 18" Wide  
3 1/2' Handle  
Flat Steel Teeth, especially tempered. Due to curve of rake all teeth touch the ground. Truly a quality sweep.  
Made from Carbon Steel



## 714

Width 2 3/4"  
Overall Length 16"



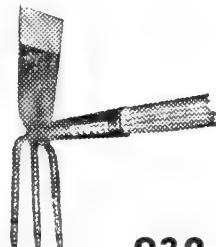
## 404-4 GARDEX WIRE BROOM

20 Teeth — 20" Wide  
Handle 4"  
Same design and quality as our No. 403-3 1/2, but has round wire teeth made from special spring steel. Ideal for extra heavy work.



## 732

Width 2 3/8" Overall Length 12"



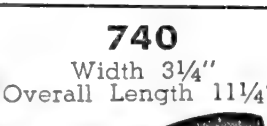
## 932 GARDEX 3-PRONG SQUART BLADE HOE

2 3/4" wide 9 1/4" deep  
4 1/2' Handle



## 703

Width 3"  
Overall Length 11"



## 740

Width 3 1/4"  
Overall Length 11 1/4"



## 172 GARDEX AERATOR

Width 2" Handle 4 1/2'  
Has Diamond Point Share



## 750 HOLLOW PLANTER

For setting out plants and bulbs. Made of steel pistol grip fits one's hand nicely, is preferred for heavy soil because it lifts soil out of the hole leaving walls soft.

## CULTIVATORS

**Speedy Cultivator.** Highly tempered steel tines, sharp and curved to penetrate the soil with an easy pulling motion. Excellent for cultivating under shrubs. 4 tines, 4 1/3 ft. handle.

**Norcross Cultivator.** Strong, rugged tool with forged steel teeth, adjustable fastening. Fine for plots not large enough to need a wheeled cultivator. 5 tooth, 4 ft. handle.

**Hand Cultivator Weeders.** Short handled weeders. Indispensable for close-in work. 3 and 5 prong styles.

Visit our store for further selection.

## HOOKS

**Grass Hooks (Sickles)**—Various styles, all with good steel cutting blades and well-balanced designs. Wood handles.

**Potato Hooks.** Best quality, with 4 broad oval tines tumbled. Handles are 4 1/2 feet long.

## HOES

**Field or Garden Hoe.** The standard, general-purpose hoe for garden and farm use. Full polished blade, 6 1/2 inches wide, riveted to steel shank. 4 foot handle.

**Onion Hoe.** Square top pattern with full polished 6 1/2 x 1 3/4 inch blade. This efficient, easy to use tool has a 4 1/3 foot spring pattern handle.

**Scuffle Hoe.** Skims under the surface of the soil, cutting off weeds, and making a dust mulch. 8 inch black blade, straight 5 foot handle.

**Warren Hoe.** The finest and strongest tool of its kind. Pointed steel head for drilling seed, covering furrows, hilling and cultivating.

## KNIVES

**Asparagus Knife.** 10 inch forged steel blade, hardened and tempered, with V-shaped cutting point. Can also be used as dandelion weeder.

**Budding, Propagating, and Pruning Knives.** Ask for available items.

**Edging Knife.** It is easy to keep the lawn well trimmed with this splendid long-handled half-moon shaped edging knife.

## RAKES

**Rakes, Steel, Curved Tooth.** Strongly made, with steel teeth on head 1/4 inch thick. Handles are straight, 5 1/2 feet long.



## PRUNERS

**Pruning Shears.** Visit our store to see latest stocks. Supplies are still uncertain, but we will have all available types.

**Tree Pruners.** The steel cutting blade easily cuts branches with smooth, clean results. Three lengths of handles available; 8 feet, 10 feet, and 12 feet long.



### Village Blacksmith Grass Hook

Finest quality steel and workmanship. The best grass hook you can buy.

#### VILLAGE BLACKSMITH ARISTOCRAT HEDGE SHEARS

Handles cannot loosen, riveted to a full width tang with three over-size double strength rivets, lacquered to a bright finish. The lower blade is serrated to hold branches in place. Tempered tool steel blade, 8 inches.

## PEST EXTERMINATORS

**RAT-NOTS**—A non-poisonous prepared bait containing genuine RED SQUILL. Safe, sanitary! Rats are attracted to RAT-NOTS because of their tempting odor. "THEIR LAST MEAL." 25c and \$1.00.

**RAT-TU . . . contains Antu,**  
the marvelous new rat killer.

Here are two remarkable new poisons, both made with the recent discovery Antu, most successful rat poison ever made available:

**RAT-TU with 25% Antu,** for tracking—sprinkle it in runways and burrows. Rats track through it and are fatally poisoned when they lick their feet, 60c.

**RAT-TU with 5% Antu,** for baiting—use it in their drinking water or for bait. Sifter-top can, 35c.

**MOUSE-NOTS**—Easily hulled, treated seed bait, appeals to the finicky taste of mice. Spread in places mice frequent. "THEIR LAST MEAL." 25c and \$1.00 sizes.

**MOLE-NOTS** — Life-saver for lawns, flower and seed beds. Sure death to bulb-eating, root-destroying moles. Safeguards bulbs at time of planting. "THEIR LAST MEAL." 35c and \$1.00 sizes.

**NOTT'S ANTU RAT PASTE (5% Antu)**—For big well-fed, hard-to-catch rats which dodge cats and traps, and are finicky in their eating habits. "THEIR LAST MEAL." Handy tubes, 35c and \$1.00.

## WHEEL CULTIVATORS

Single and double wheel, combined seeders and hoes, all metal construction, rust resistant, light weight, fully adjustable with attachments. Many makes and models.



### MASTERS FERTILIZER MISER

Sows Fertilizer and Grass Seed Evenly—Saves Plant Food—Saves Seed

Every Ounce Controlled

New design spreader with fingertip microscopic control; years ahead in ease and accuracy of operation.

#### Three Home Lawn Models

25S Steel wheels, 20 lb. cap. ....	\$6.75
25D Rubber tires, 20 lb. cap. ....	\$7.75
30 Rubber tires, 50 lb. cap. ....	\$10.75

For larger users—estates, golf courses, etc.

241S—Steel wheels, 24", 75 lb. cap. ....	\$27.50
241D—Rubber tires, 24", 75 lb. cap. ....	\$35.00
361—Steel wheels, 36" 120 lb. cap. ....	\$37.00
361D—Rubber tires, 36", 120 lb. cap. ....	\$44.00
361SD—Stainless steel bottom, 36", 120 lb. cap. ....	\$52.75

### MASTERS PLANTER COMPANY

Benton Harbor, Michigan

## DOO-KLIP GRASS SHEARS

Keeps the hand clear of the ground. Operated by an easy up and down movement. The blades are made of case hardened rust resistant steel. Easily opened for sharpening by removing one nut. Also with long handle for perfect trimming.



## The Old Reliable OLD TRAPPER RODENT BAIT

### Old Trapper Mole Killer

A poison bait for moles and gophers. Very effective on farms, lawns, gardens, golf courses, cemeteries, estates, etc. 2 oz. packages.

### Old Trapper Mouse Nox

A seed that kills mice. The mice eat only the heart of the seed. One bait is usually sufficient. 2 oz. packages.

### Old Trapper Rat Krunches

These are red squill baits. They contain foods which are attractive to rats, are not attractive to human beings, domestic animals and poultry. In packages of 100 baits.

### Old Trapper Poisoned Grain

Oats, wheat and barley are highly impregnated and made especially attractive to rodents. Field mice succumb to it, too!

For those who prefer a grain, we have this prepared poisoned bait, more efficient than traps or other methods of killing. It is unattractive to cats, dogs and other pets, but sure death to rats, mice, ground squirrels and prairie dogs.

Old Trapper is made with approximately one-third greater killing power than the average baits on the market.

**Inexpensive  
but SURE!**

## TAT ANTU

### The modern rat killer

Made with the new miracle rat killer; ANTU. A special preparation of ready-mixed in dry bait form, clean and easy to use. Appeals to taste instincts of rats so that they devour it readily and literally drown in their own body fluids. Only a small quantity placed in runways or where it is easily accessible will do the job. Harmless to humans, livestock and poultry. Keep from reach of small dogs and cats.



## TAT MO-GO

### KILLS MOLES & GOPHERS

Results guaranteed. Just place in runs. Large container (over 300 baits): \$1.00.

# INSECTICIDES and FUNGICIDES



## ACME INSECTICIDES and GARDEN PRODUCTS

**Acme Rotenone Garden Guard**—controls the widest variety of chewing and sucking insects of any insecticide on the market today. Non-injurious to humans, pets and animals. Use as dust or spray to control aphids, bean beetles, asparagus beetles, horn worm, tarnish plant bug, cabbage worms, currant worms, rose caterpillars, blister beetles and other common insects.

**6% Chlordane Dust**—For dusting in gardens and on lawns to control ants, cutworms, chinch bugs, chiggers, earwigs, slugs, snails, sowbugs, sod webworms, wireworms, white grubs, including Japanese beetle grubs, root infested maggots and many others. In the home for cockroaches, silverfish, carpet beetles, crickets, etc.

**Acme Kopper King**—A scientific Bordeaux spray. Kopper King is a Basic Copper Sulphate, a fungicide of revolutionary importance. It is neutral and insoluble, requiring no lime to keep it from burning. Kopper King contains 52% copper, twice as much as ordinary copper sulphate (common bluestone). Can be used either as a liquid spray or combined with a carrier in making a home-made dust. Favored for use on tomatoes to avoid Bordeaux (lime) injury. Also for prevention of late blight on potatoes following the Red River Potato Mix for insect control.

**Acme Tomato Dust**—A general garden insecticide and fungicide with special emphasis on complete tomato protection.

Controls early and late blight as well as horn worm, fruit worm and flea beetle on tomatoes as well as on cucumbers, beans, cabbage, potatoes and many flowers such as hollyhocks, asters, roses, azaleas, etc.

**Acme Winter Garden Spray**—An oil spray for use in winter or early spring, when trees and shrubs are in a dormant condition and better results can be secured in control of certain insect pests. A clean-up spray to place trees and shrubs in the healthiest conditions for spring growth.

**Acme Dry Lime Sulfur**—For use on fruit trees, rose bushes and nursery stock after the leaves have fallen, or before they appear in the spring in the control of scale insects. Dry Lime Sulfur has all the effectiveness of the liquid product when dissolved in water. Excellent for use as a wetting agent for dusting sulphur. One part of Dry Lime Sulfur will wet up to four parts dusting sulphur at a considerable saving over use of so-called wettable sulphurs. Approved by U. S. Dept. of Agriculture as an animal dip.

**Acme Bordeaux Mixture**—Repels leafhopper and flea beetle, also prevents blight from gaining a foothold in the injuries to the leaf surface. The best fungicide known for potato vines vegetables, flowers and ornamentals.

**Acme Arsenate of Lead**—Has no superior for fluffiness and bulkiness. A favorite for the control of most chewing insects damaging shade trees, vegetables, berry bushes, vines, etc. It does not burn the foliage and has the greatest sticking power of the entire list of arsenicals.

**Acme Weed Killer**—Destroys weeds and all vegetation. The kind to use on driveways, clay courts, paths, etc. Also widely used in spotting out dandelions, plantain, and other noxious lawn weeds by application undiluted, using a weed cane or squirt-bottom can.

**Stop-Tree Banding Compound**—"Stop" is the name of Acme's splendid new tree banding compound, which acts as an uncrossable barrier to crawling insects such as: ants, worms, and certain other varieties of insect life. Certain insects are completely controlled by the use of STOP, while against some

other insects Stop greatly simplifies the spraying problem later.

**Acme All Round Spray**—For roses, azaleas, other flowers, shrubs, vegetables and fruit trees. A new, modern, carefully formulated multi-purpose product designed to provide with one application the best available protection against both insects and fungi such as rose chafer, azalea flower spot, thrip, black spot, downy mildews, leaf spot, many rusts, Japanese beetle, leafhopper, flea beetle, aphids, cabbage worm and many others. Suitable for dusting as well as spraying.

**Rotenone Garden Spray (NNOR)**—Makes available the tremendous killing power of rotenone in a more effective form than ever. Penetrates the hairy or waxy coverings of insects to put rotenone in direct contact with the body, resulting in quick killing action. Kills most common garden insects of both sucking and chewing types.

**Acme Kopper Queen**—A strong liquid copper spray for control of mildew, leaf spot and black spot on rose bushes, flowers and many other kinds of foliage. Stainless—leaves a thin insoluble film of copper, preventing fungous attack, without any drawback of unsightly residue.

**Acme Dawg-Gone**—Keeps dogs away from trees, shrubs or any place that is used by them as a smelling post. To use, just hang tube with cap and cork removed at the point of approach; the odor will slowly escape and keep the dogs away.

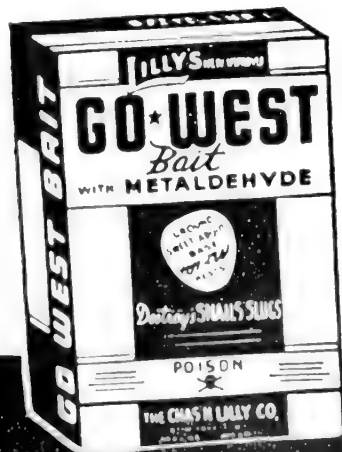
## Seed Treatments for disinfection and protection

**ARASAN**—An effective dry seed disinfectant and protectant for destroying surface seed-borne organisms and protecting the seed against soil-borne organisms responsible for seed decay. Improves stands of seedlings and increases yield of quality crops.

**SPECIAL SEMESAN**—Effective in preventing and controlling both brown patch and dollar spot. Provides wide margin of safety with little danger of yellowing or thinning turf when applied as directed. One pound treats up to 6,000 square feet.

**NEW IMPROVED CERESAN**—An inexpensive dry seed treatment which effectively kills seed-borne diseases, such as root-rot and seedling blight, by both contact and vapor. Costs as little as 1-3/5c per bushel of seed. Easy to use, does not damage drill nor retard drilling rate. Use on barley, oats, wheat, rye, sorghums, flax, peas, cotton. 1 lb. treats 32 bushels.

**2% CERESAN**—Reduces seed rotting and damping-off, gives more uniform stands with less seed. One pound treats from five to eight bushels of seed.



Protect Your Garden  
Against Pest Damage

**GO-WEST**  
ATTRACTS AND DESTROYS

Effective RAIN or SHINE! For Snails, Cut Worms, Slugs, Earwigs, Root Weevils and other pests of like chewing habits. Safe, convenient, economical.

1 lb. . . . 35c  
2 1/2 lbs. . . 75c

**GO-WEST** APPLE BASE  
WITH METALDEHYDE





**RELIABLE  
DEPENDABLE  
PESTICIDES**

**Black Leaf 40** kills aphids and similar sucking insects by contact and fumes. No burn. No stain. *Also delouses poultry.* Backed by 40 years of use. **Black Leaf Garden Dust** contains nicotine, pyrethrum, rotenone and a fungicide for insect and disease control. **Black Leaf Rotenone Dust** contains rotenone and sulphur blended on a special carrier material.

## ANTROL-ANT TRAPS

Metal traps containing two types of material that attract and kill grease and sweet-eating ants.

Each.....15c



## SNAROL

**Cutworm Bait**  
Non-injurious to vegetation. Attracts and kills cutworms, snails, slugs, sowbugs, earwigs.

1 lb., 35c;

2 1-2 lbs., 75c



## ROSE TREATMENT

Offers rose growers — in a single packaged formulation—a pre-mixed ready-to-use product for control of the chief rose insects and diseases. 1/2 lb. can \$1.00 1 lb. can \$1.75



## FLOWER TREATMENT

A pre-mixed insecticide-fungicide combination for protection against rusts, leafspots, anthracnose, scab and the control of many chewing insects. 1/2 lb. can \$1.00

A PRODUCT OF  
**MICHIGAN CHEMICAL CORPORATION, SAINT LOUIS, MICHIGAN**

## ACME GARDEN DUSTS AND SPRAYS



## ACME GARDEN GUARD

(.75% Rotenone)

**Widest range of all insecticides for the garden**

Acme Garden Guard controls the widest variety of chewing and sucking insects of any insecticide on the market today. Non-injurious to humans, pets and animals. Use as dust or spray to control aphids, been beetles, asparagus beetles, horn worm, tarnish plant bug, cabbage worms, currant worms, rose caterpillars, blister beetles and other common insects. 1 lb. sifter \$.45; 1 lb. pump gun, \$.60; also available in 4 lb. pkgs. and 50 lb. bags.

## ACME 6% CHLORDANE DUST

**Outdoors and indoors—for garden, lawn, house**

For dusting in gardens and on lawns to control ants, cutworms, chinch bugs, chiggers, earwigs, slugs, snails, sowbugs, sod webworms, wireworms, white grubs, including Japanese beetle grubs, root infesting maggots and many others. In the home for cockroaches, silverfish, carpet beetles, crickets, etc.

1 lb.....\$.50 4 lb.....\$1.40



## ACME ALL ROUND SPRAY



For roses, azaleas, other flowers, shrubs, vegetables and fruit trees. A new, modern, carefully formulated multi-purpose product designed to provide with one application the best available protection against both insects and fungi such as rose chafer, azalea flower spot, thrip, black spot, downy mildews, leaf spot, many rusts, Japanese beetle, leafhopper, flea beetle, aphid, cabbage worm and many others.

Suitable for dusting as well as spraying. 1 lb. Carton \$.95; 4 lb. Carton \$3.00.

## ACME ARSENATE OF LEAD



The favorite arsenical insecticide for the control of most chewing insects damaging shade trees, vegetables, berry bushes, vines, etc. Has no superior for fluffiness and bulkiness. Safe to use on tender foliage.

1 lb. carton .....\$.60  
4 lb. bag .....\$1.40

## ACME TOMATO DUST



A general garden insecticide and fungicide with special emphasis on complete tomato protection. Controls early and late blight as well as horn worm, fruit worm and flea beetle on tomatoes as well as on cucumbers, beans, cabbage, potatoes and many flowers such as hollyhocks, asters, roses, azaleas, etc. 1 lb. sifter, \$.50; 4 lb. pkg., \$1.15; also available in 50 lb. bags.

## ACME DURADUST No. 50



Contains 50% wettable DDT in micronized form. Controls codling moth, oriental fruit moth, leaf hopper, flea beetle, psyllid, potato bug, potato aphid, Japanese beetle, thrip, cabbage worm, rose chafer and many others. Use as a

spray, like Arsenate of Lead, or extend with inerts for dusting. Highest strength possible in quality processing. 1 lb. \$.75; 4 lbs., \$1.75; also available in 40 lb. bags.

## ACME BORDEAUX MIXTURE



The most widely used copper fungicide for preventing fungous spores gaining a foothold on plant surfaces. Prevents losses caused by blight, rot, mildew, scab, anthracnose, etc. Recommended for vegetables, flowers and ornamentals. Contains copper sulphate and lime in equal proportion for maximum protection and minimum burn.

1 lb. carton \$.45; 4 lb. bag \$1.15.

## ACME LIME SULFUR (Dry)



For use on fruit trees, rose bushes and nursery stock after leaves have fallen and before they appear in the spring to protect against scale, peach blight, leaf curl and twig borer.

For summer spraying against scab, root, blotch, red spider and mites. 1 lb. \$.49; 5 lb. \$1.85.

**PESTMASTER**



## ROSE TREATMENT

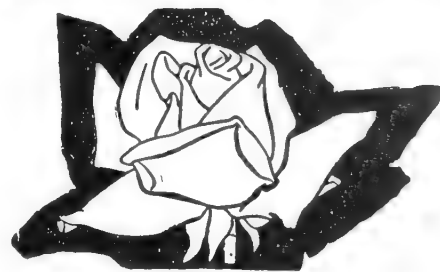
Offers rose growers — in a single packaged formulation—a pre-mixed ready-to-use product for control of the chief rose insects and diseases. 1/2 lb. can \$1.00 1 lb. can \$1.75



## FLOWER TREATMENT

A pre-mixed insecticide-fungicide combination for protection against rusts, leafspots, anthracnose, scab and the control of many chewing insects. 1/2 lb. can \$1.00

A PRODUCT OF  
**MICHIGAN CHEMICAL CORPORATION, SAINT LOUIS, MICHIGAN**



## TRI-OGEN

**Tri-Ogen Rose Spray**—A 3-way rose treatment: gives your plants maximum insecticide protection, fungicide protection against both powdery mildew and black spot. By controlling these ailments, whole uninjured leaves enable the plant to breathe properly. And at the same time, the plant absorbs Tri-Ogen's stimulants. No other spray needed. Now contains Fermate.

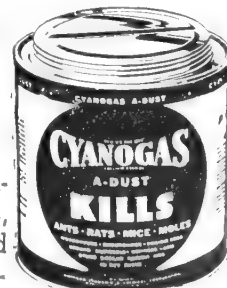
## EVER GREEN Garden SPRAY

A highly concentrated pyrethrum spray very effective on practically all types of insects and safe on all plants.



## CYANOGLAS

**Kills rodents,  
moles, ants**



**Cyanogas** — Granular, kills wireworms, ants, gophers, and similar pests. Wireworms controlled by drawing them to rows by a bait crop of cull beans and applying Cyanogas an inch below the bait one week later.

**Cyanogas A-Dust**—Will kill all moles, rodents and ants in the ground. Positive control of Japanese beetle grub.

# FACTS about the new insecticides

With the remarkable advances that have been made in the past several years in modern pest control chemicals, it is easier than ever for you to grow a bigger, better and more beautiful garden.

Thanks to modern scientific research, such potent chemicals as DDT, TEPP, chlordane, methoxychlor, 2, 4-D, and 2, 4, 5-T and the recently-developed "lindane" are now available to home gardeners.

## Modern Dusts

If you prefer to dust, you have several

good multi-purpose garden dusts to choose from. These dusts contain balanced combinations of modern insecticides and fungicides—but may also contain reliable old-type chemicals such as sulfur.

An example of a good multi-purpose garden dust is one that contains two insecticides and two fungicides—the most important ingredient being, of course, the potent new insecticide, **lindane**. This multi-purpose dust controls certain sucking, insects chewing insects, wireworms and other soil insects; ants, earwigs, spiders;

and also such plant diseases as mildew, black spot and rust.

Another example is a general flower and rose dust. This is especially formulated for your roses, other flowers, ornamentals and shrubs. It is a combination of several chemicals, two of which are lindane and DDT. This dust also is effective in controlling sucking, chewing and soil insects; ants, earwigs, and many plant diseases.

## Modern Sprays

If you prefer to spray your flowers and other garden plants, there are modern multi-purpose garden spray sets and rose spray kits you can use. These consist of several bottles, each containing one of the modern insecticides or fungicides. You combine them in your sprayer according to the directions and you get multi-purpose control of both insects and fungus diseases.

In one such spray set, for example, you will find a bottle of modern insecticide spray, a bottle of the reliable older-type oil spray, and a bottle of copper fungicide spray for powdery mildew. In another spray set you'll find a bottle containing the newest of garden insecticides—lindane, and a bottle of a recently-developed fungus spray that has been doing wonders in controlling powdery mildew, rose rust and peach leaf curl. In addition, this particular spray set contains one of the new-type garden hose sprayers that is designed to make your garden spraying as easy as watering. You just connect the sprayer to the end of the garden hose and turn on the water to spray.

**Miller's GARDEN COMPOST MAKER**  
A 5-pound package of Miller's Garden COMPOST MAKER will make several hundred pounds of high-grade organic humus fertilizer by converting garden and kitchen refuse, weeds, leaves, and grass clippings into a rich organic humus compost.

**Miller's GARDEN BOOSTER POWDER**  
Make your own Booster Fertilizer Solution as low as 1c a gallon with Miller's Garden BOOSTER POWDER. Stimulates Plant Growth, Root Formation, Fruit Setting, Flower Production. Produces vegetables rich in flavor and minerals essential to your health.

**Miller's GARDEN SPRADUSTO**  
Insecticide—Fungicide  
SPRAY or DUST  
Flower Gardens, Shrubs, Ornamentals  
Used regularly controls Powdery Mildew, Black Spot, Rusts, Aphis, Leaf Hoppers, Beetles, Caterpillars.  
Effective — Safe to Use.  
Contains 5% DDT, Rotenone, Pyrethrum, Sulphur, Ferrocide.

**Miller's LIQUID LIME SULPHUR with spreader**  
CALCIUM POLYSULPHIDE SPRAY  
Year-Round Insecticide-Fungicide Calcium Polysulphide Spray for Powdery Mildew, Peach Leaf Curl, San Jose Scale, Red Spider and Leaf Blister Mites, and Apple and Pear Scab.

**Better Gardening WITH Miller's**

*Insist on Miller's*

## CONTROL SOIL INSECTS



Stop root maggots, weevils, grubs, etc., with Carco-X, the DIFFERENT insecticide!

Carco-X is used first on the ground, before planting—and later, on the plant itself. Results are amazing. All root crops and many others prosper even in worst-infested areas!

## See for yourself what Carco-X can do

Wherever worms, root maggots and other soil-infesting pests occur, you can have fine healthy crops by using Carco-X. Carrots and other root crops, cabbages, cauliflower, strawberries and many other crops thrive, even when neighboring gardens fail. Foot rot in peas, fairy ring on lawns, and other garden troubles disappear. Evergreens, shrubs, fruit trees, shade trees do better, too!

## Cost is low

Carco-X leaves no odor, doesn't affect taste. Carco-X is inexpensive, too. Pint (makes 25 gallons of spray), \$1.25; 1/2 pt., 85c; qt., \$1.95; gal., \$4.95.

## LILLY Fresh SEEDS



Over 62 years of constant seed research and development is your assurance of the finest vegetable or flower seed obtainable. That's why more and more garden growers are asking for LILLY'S "Trial Ground Tested" seed.



**The Emblem of PURITY in Seed**



# WEED KILLERS

## THE WEED KILLING MIRACLE

### NEW IMPROVED WEEDONE®

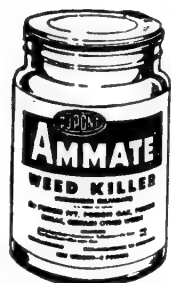
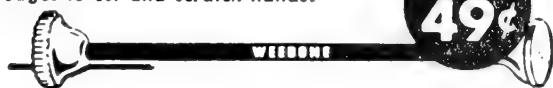
Contains the powerful 2,4,5-T and 2,4-D

Now Weedone kills woody plants as well as dandelions, plantains and other lawn weeds, without killing grass. It kills poison ivy, poison oak, the brambles (blackberry and raspberry), honeysuckle and over 90 other woody plants. Sprayed on top and sides of tree stumps, it prevents resprouting.

The new, improved Weedone does not give off vapors that cause injury to rose bushes, tomatoes, flowers or ornamental shrubs. Harmless to humans and animals.

8-oz. can \$1      1-gal. can \$6.95  
1-qt. can \$2.75      5-gal. can \$25

**Weedone Plastic Applicator.** Cap makes handy ½-oz. measure and fits any screw-top gallon jug. All plastic; no sharp metal edges to cut and scratch hands.



### DuPont AMMATE

(Ammonium sulphamate)

A non-poisonous, non-inflammable weed killer, which can be applied by hand or power sprayer, or can be applied dry. Will

kill poison ivy, poison oak, poison sumac, dandelions and plantain. Exerts only temporary soil sterilizing effects. Use ¾ to 1 lb. to gallon of water and spray on foliage.

## It's time to order WEED-NO-MORE

SPRAY AWAY UGLY LAWN WEEDS THIS EASIER, PROVEN WAY

This spring, get rid of dandelions and other ugly lawn weeds. Just spray on Weed-No-More . . . Weeds die, roots and all! Have a beautiful, weed-free lawn to be proud of.



8 oz., makes 8 gallons, enough for average lawn... \$1.00

Economy qt., makes 32 gal....\$2.98

WEED-NO-MORE SPRAYER—fits any gal. or ½-gal. glass jug. Built-in measuring device included! Only 39¢

## SPOT-KILL Lawn Weeds WEEDUST

(TRADEMARK)

2,4-D in the ready-to-use can

Kill those here-and-there weeds in your lawn with Weedust—2,4-D in powder form. Just shake a pinch of Weedust directly on the weed from the can. No mixing or measuring or sprayer needed.

Large size can, 75¢  
Enough to kill 1,000 weeds

## Acme Weed Killer



A powerful quick-acting arsenical weed killer for destroying weeds and all plant life on driveways, tennis courts, paths, etc. It is the type used by railroads to keep all plant life from growing on their road-bed.

# PET SUPPLIES

**Petpak Vitamin Song Seed**—Fortified with cod liver oil and yeast. A modern scientific mixture of twelve different varieties of seeds, imported from all over the world. The finest quality obtainable, vacuum air washed to insure removal of all dust, chaff, dirt, etc. A complete bird food, containing vitamins A, B, D, E and G. Feed daily or alternate with Petpak Vacuum Air Washed Bird Food. Sanitary, metal pouring spout cans.

**Petpak Song Restorer**—Canaries need a song stimulating food in addition to their regular seed. Restores, promotes, and maintains song. Only the finest ingredients used.

**Petpak Dog Soap**—Developed not only to cleanse the hair and skin but to deodorize and kill all fleas and lice. Not just a soap, but a product especially prepared for use on all dogs.

**Petpak Natural Fish Food**—A scientific composition of foods and mineral elements necessary to growth and health.

**Petpak Puppy Capsules and Petpak Dog Capsules**—The formula used in preparing these two products is probably the most effective known. They are manufactured from the finest ingredients obtainable and we believe them unsurpassed by any similar remedies, regardless of price. They are harmless to the animal and cause no bad after effect, gagging or gas.

## Stops Dog Itch!

**Sulfadene**—This amazing new discovery banishes fungus skin infections of dogs and cats. Stops the itch that makes their summer a nightmare—even saves pets. In 4 oz. bottles.

# HORMONE AIDS FOR BETTER PLANT GROWTH

## FASTER, SURER ROOTING

for cuttings, seeds and bulbs

## ROOTONE®

the plant hormone powder

Rootone stimulates the natural tendency of seeds, cuttings and bulbs to put out roots. Rooting is faster and heavier, resulting in bigger, earlier plants. Endorsed and used by leading growers everywhere.

Trial packet, 25c • 2-oz. package, \$1  
1-lb. can, \$5

## MORE TOMATOES!

## FRUITONE®

Spray Fruitone at blossoming time and each plant will set more fruit and bear more big, meaty tomatoes. Spray Fruitone for bigger crops of beans and lima beans, too. The dollar package makes 25 gallons of spray.

2/5 oz. packet, 25c • 2-oz. package, \$1  
12-oz. can, \$5

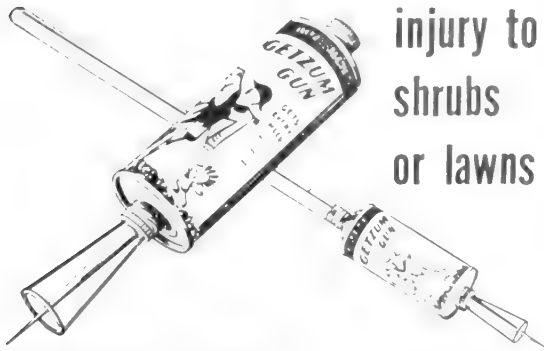
## TRANSPLANT SAFELY

## TRANSPLANTONE®

Transplantone reduces shock and wilt when seedlings and plants are moved. Stimulates root growth so that fewer seedlings die and more come to early, healthy maturity. Used to water plants, shrubs and trees, Transplantone encourages growth and bloom.

½-oz. packet, 25c • 3-oz. package, \$1  
1-lb. can, \$4

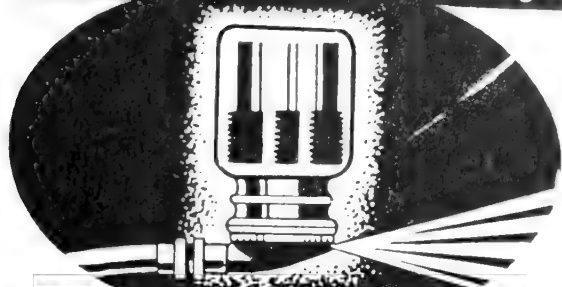
**KILLS WEEDS** without injury to shrubs or lawns



### GETZUM GUN

Applies weed killer direct to the heart of the weed. Easy and sure! Gun \$1.75; weed killer—pint, 30c; gal., \$1.75.

**Greener Lawns...Less Watering**



### FERTILIZING WITH GAT SPRAYER

NO BURNING • NO ODORS  
NO WASTE \$1.45 GLASS JAR NOT INCLUDED

**POWERED BY YOUR GARDEN HOSE!**

### Hayes Jr. GARDEN SPRAY GUN

Full 3-gal. capacity. Delivers wet, fan-shaped spray in proper proportion, up, down, sideways. Special long-stream head for trees. Precision-built for years of service.

### Hayes FERTL-RAIN

Fertilize while you water! Lift thumb to water, lower thumb over vent to apply liquid fertilizer, lawn moth control, weed killer. Holds equivalent of 15 gals. solution. No moving parts. Built to last!

**\$2.45**



### Hayes SUDZIT CAR WASHER

Soaks, applies dirt-lifting suds, rinses, in one operation! For cars, porches, screens, etc. Includes enough detergent to wash 24 cars, applicator, sponge.

**\$4.95**



**Let Us Show You These and Other Famous Hayes Products**

HAYES-ETTE NOZZLE • HAYES SPRINKL-AIR • HAYES MAN-D SPRAYER



Easy to Use . . . Efficient

## SPRAYERS and DUSTERS

### HUDSON "SIMPLEX" PERFECTION

The Higher the Pressure, the Tighter the Seal Simplest, safest, most dependable compression sprayer ever made. Cover seals from inside of tank . . . pressure provides positive leak-proof seal. Holds 4 gallons. All-welded tank. All-angle nozzle. Comfortable carrying strap with 2 1/2"x7 3/4" pad.

**HUDSON CLIMAX.** Same advanced design but with 3 1/2-gallon tank, regular straps, fixed angle nozzle.

**HUDSON CLIMAX JR.** Same as Climax except 2 3/4-gallon capacity.



Big Value at Low Cost

### HUDSON Funnel-Top SPRAYERS

**HUDSON LEADER.** Premium quality materials and workmanship. Funnel-top for easy filling. Screw-type lock. Holds 3 1/2 gallons. Large, powerful pump. Valve locks open for continuous spraying.

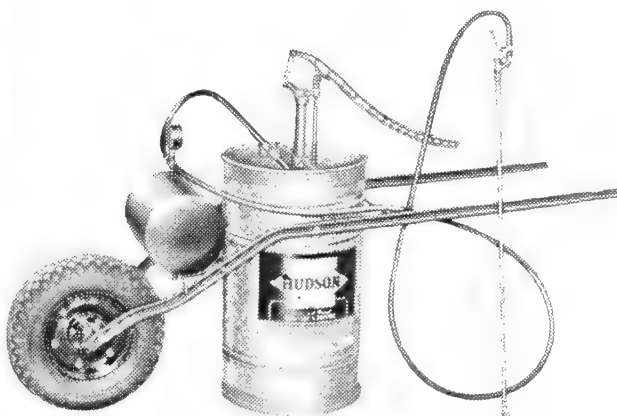
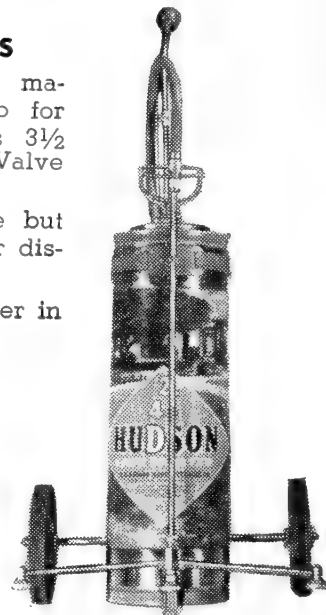
**HUDSON BOOSTER.** Similar to above but with cam-type lock, somewhat shorter discharge equipment.

**HUDSON BUGWISER.** Similar to Booster in 2 1/2 gallon capacity.

No Weeds—No Work

### HUDSON 2, 4-D SPRAYER

Just fill tank with weed-killer solution—pump up—open valve—and push sprayer across lawn. Sprays 24-inch swath. Ideal for liquid fertilizer, too. Copper tank. Chemical-proof hose. Two models—3 1/2 and 2 1/2 gallons.

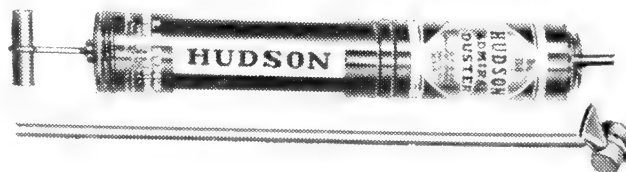


### HUDSON Sunshine Porta-Sprayer

Compact, perfectly balanced, powerful sprayer. Provides 250 lbs. pressure. Use for all spraying work. 15 gallon tank . . . non-clogging agitator on strainer. With or without pressure tank . . . with pneumatic, cushion or steel wheel.

### HUDSON ADMIRAL DUSTER

Large capacity, long reach, powerful blast. Directional nozzle. Discharges just a puff or a blast at will. Easy to fill. A "must" in every garden and home.



### HUDSON HOMESTEAD SPRAYER

Double-tube nozzle gives twice the spray, twice the coverage. Excellent for small home gardens, for residual spraying anywhere. Brass cap, pump end and syphon tubes. Glass jar holds 24 ounces.

### HUDSON CRITIC SPRAYER

A flick of the nozzle pin gives fine mist or wet residual spray. Glass jar holds 24 oz. Same principle also in HUDSON MERCURY with heavy tin-plate container.



### ASK US

about other sprayers for garden, home, farm, orchard and other uses.





**How? When?**

## HOME GARDENING GUIDE

**Where? Why?**

### GLADIOLUS

Gladiolus are among the easiest of all flowers to grow. But while they stand neglect better than most plants, they also respond beautifully to proper treatment. So it is well to note these brief points: Soil should be well drained, sandy loam, preferably where no glads have been grown for the past 3 years. Cultivation to a depth of 18 inches is desirable. Full sun is best, although they do fairly well in partial shade. Glads may be set out as soon as frost is out of the ground, but extra-early planting gains little. A succession of plantings about ten days apart gives a long blooming season. Depth of planting should be no more than 4" in heavy soil and 5 to 6" in light, sandy soil. Space bulbs 3" apart in rows 18 to 30" apart. Be sure to eliminate air pockets under the bulbs. Place bulbs in a well worked trench in staggered or zig-zag row—and cover at first with about two inches of loam. When shoots begin to appear, work balance of loam into the trench. Watering is important. Glads need an abundance of moisture, especially after the plant is well developed.

### DAHLIAS

Any reasonably careful gardener can grow dahlias easily and successfully. **Soil needs** of dahlias are no different than those of a good vegetable garden. Drainage and porosity are important. **Fertilizing** calls for nothing more than a good balanced commercial fertilizer. **Planting** is simple. Set stout stakes first. Plant the tuber in a hole 6 inches deep, with eye up, and neck near stake. Cover with just enough soil to hide the tuber. As the eye grows, keep filling in soil. **Culture.** Cultivate frequently for about the first 10 weeks. Do not cultivate when flowers are in bud or bloom. Allow only one main stalk to grow. When stalk is about 10 inches high, pinch out the center just above the 2nd pair of leaves. When buds appear, pinch out all except the central one. Also pinch out all new lateral shoots except the two nearest the main stalk. This helps produce large blooms on low, bushy plants and encourages long stems.

### CANNAS

While cannas will tolerate cold soil, they usually do not start growing until hot

weather comes. If planted in round beds, you will need 37 plants for a 10 foot bed (18 plants on the outside, 12 in the second row, six for the third row and one in the center). A 7 foot bed will use 19 plants, with 12 plants on the outside row, six for the middle row and one plant in the center.

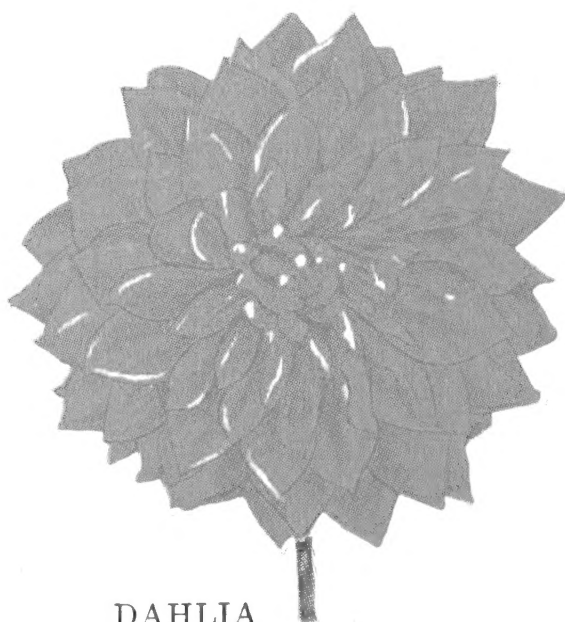
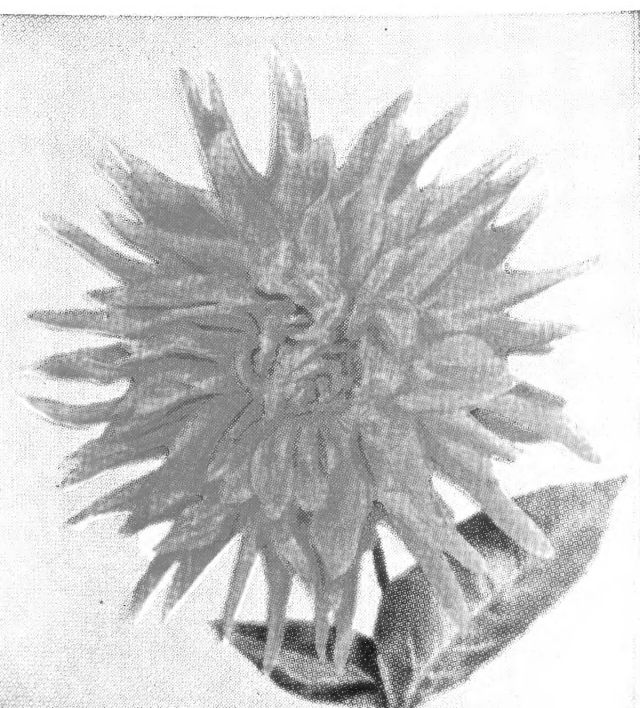
### FANCY LEAVED CALADIUMS

These spectacular foliage plants are particularly valuable because they do well in shade. Start them in a mixture of half sand and half leaf mould at a temperature of over 70 degrees. When the roots are well-developed and the shoot is beginning to show, pot up in rich soil. Set out in the garden when weather is warm and settled. Elephant ears can be planted directly in soil out of doors, but the weather must be warm and settled, otherwise they rot.

### LILIES

Even the swamp lilies will not tolerate wet feet; all must have perfect drainage. Yet they like a moist, cool soil. This means that liberal quantities of old well-decayed compost is almost essential for lilies.

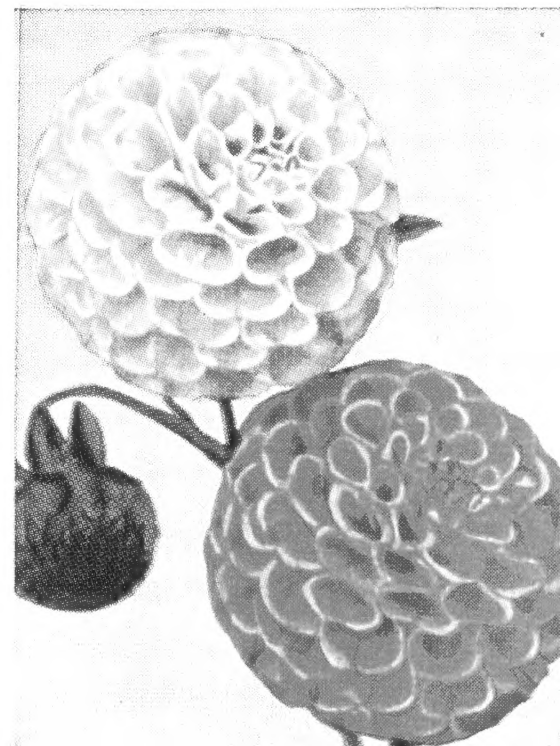
### CACTUS DAHLIA



DAHLIA

Formal Decorative

### POMPON DAHLIAS



# FLOWER BULBS for Spring Planting



## ANEMONES

Large, poppy-shaped flowers of rich, vivid colors. Gorgeous blues and violets predominate.

Packaged or in bulk \$1

## BEGONIAS

TUBEROUS—Large, Double-Camellia flowers of exquisite form in separate colors of Orange, Pink, Red, White or Yellow.

Packaged or in bulk \$1



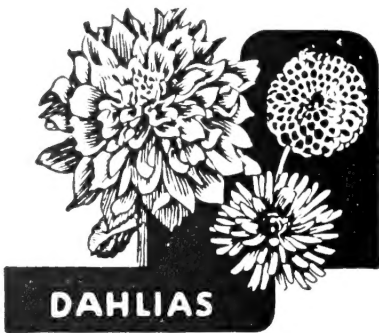
## LILIES

Rubrum Lilies . Regale Lilies  
Tiger Lilies . . Easter Lilies

Packaged or in bulk \$1



## GARDEN LILIES



## DAHLIAS

## DAHLIAS

LARGE FLOWERING—Beautiful, decorative flowers in gorgeous Lavender, Orange, Purple, Red, Rose, White or Yellow.

POMPONS — Delightful little flowers for bowl or basket arrangements. Lavender, Orange, Pink, Purple, Red, White or Yellow.

Packaged or in bulk \$1



## TIGRIDIA

Large, three-petaled, exciting flowers in fascinating color combinations. Easily grown in any rich soil.

Packaged or in bulk \$1

## RANUNCULUS

Large, full-petaled, mostly of the Double Camellia Flower Type. A rich mixture of colors.

Packaged or in bulk \$1



## RANUNCULUS

# GLADIOLUS

Outstanding quality flowers in clear tones of Lavender, Orange, Pink, Purple, Red, Rose, White, Yellow or Mixed.

PACKAGED OR IN BULK \$1

## BULB PLANTING INSTRUCTIONS

	Plant in Open Ground			Plant in Pots No. Bulbs to 6-in. Pot
	Time	Depth	Exposure	
Anemone*	Spring or Fall	1 in.	Sun	Pink 4; Yellow 2 8-10 4-6 8-10 3
Callas*	Fall	1-2 in.	Shade	
Crocus	Fall	2 in.	Sun	
Dutch Iris	Fall	4 in.	Sun	
Freesias*	Fall	1-2 in.	Sun	
Hyacinths	Fall	4-5 in.	Sun	1 (Regal) 6 3 or 4 ..... 5-6
Lilies	Spring or Fall	6-8 in.	Sun, Shade Roots	
Muscari	Fall	3 in.	Sun or Shade	
Narcissus	Fall	4-6 in.	Sun	
Ranunculus*	Spring or Fall	1 in.	Sun	
Tulips	Fall	6-8 in.	Sun, Light Shade	..... ..... 3 or 4 3 or 4 1
Gladiolus*	Spring	4 in.	Sun	
Dahlia*†	Spring	4-6 in.	Sun	
Tigridia	Spring	2-3 in.	Sun	
Tuberose	Spring	2 in.	Sun	
Tuberous Begonia*†	Spring	Slight	Shade	

\*Bulbs not hardy where winters are cold.

†Tuberous begonias for cool shady locations only.

‡Plant in deep hole, fill in as plant grows.

Bulbs are easy to grow and to flower. Refer to the above simplified table to determine proper depth to plant. Light soils take deeper covering than heavy soils. Whether indoors or out provide the best soil possible and keep growing bulbs moist at all times.

Visit our Store  
For a Complete  
Line of Bulbs



# *Remember—* —we LIVE, WORK, and GARDEN right here in your own neighborhood

## **We offer a complete year-round, local garden service**

There's a year-round working partnership between us and our gardening customers. They like to shop here, because they know that, whatever the season, we're always ready to counsel with them and to supply all their garden needs.

## **We offer only good, fresh seeds, packet or bulk**

We get along so well with our gardening friends because they know we do everything in our power to bring them the best of seeds, always! A packet or a ton, for home gardener or professional grower, it's always the finest we can procure.

## **We offer a complete supply service for all gardeners**

One excellent reason why you NEED the services of a store like ours is the COMPLETENESS of our service.

As seed professionals, we know what you'll need at every step of the way. That's why it's so satisfying to shop here for garden supplies.

## **We offer cheerful and expert garden counsel**

Our practical knowledge of gardening is part of our stock in trade. We want all your gardening efforts to be successful, and we try to do all we can to make them so. As "Garden Headquarters" we feel that's part of our job! Come in and talk it over!"

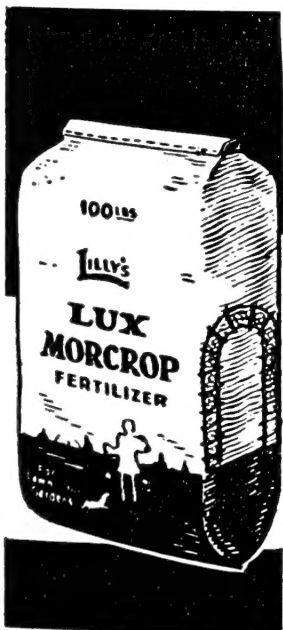
## *We recommend—*

### **For your lawn planting:**

Our choice is the Pacific Northwest's favorite lawn seed, blended especially for our climate and our soil—LILLY'S CREBENT! Crebent is a blend of only fine leaved grass varieties, chosen to give you staggered dormancy and long-lasting beauty.

### **For your lawn feeding:**

Again the Northwest's favorite, MORCROP! Morcrop is the complete fertilizer with an organic base—for Spring, Summer and Fall use on lawns, flower beds, and vegetable gardens.





# Beauty and Color can be Yours

## Plant These Lilly's Flower Seed Collections



**LILLY'S JUMBO PACKET SWEET PEA COLLECTION**  
 Seven individual packets of choice Western varieties.  
 SHIRLEY TEMPLE—Soft rose pink  
 AMBITION—Lovely lavender  
 WELCOME—Deep scarlet  
 vermillion  
 SMILES—Salmon large  
 Lilly's "7-in-1" jumbo packet gives you all these . . . a lavish, early display of exquisite form and color on long sturdy stems. **50c**



**LILLY'S FAMOUS NASTURTIUM GROUP**  
 Six lovely double nasturtium varieties each a distinctive color.  
 GOLDEN GLEAM—All America  
 SCARLET GLEAM—All America  
 ORANGE GLEAM  
 MOON GLEAM  
 CRIMSON GLOW  
 SALMON GLEAM  
 These "easy-to-grow" Nasturtiums are individually packeted so that you can plant them in color combinations to suit your taste. Flowers are large and pleasingly sweet scented. **50c**



Arrangement by Mrs. W. I. Taggart  
 Seattle, Washington

LILLY'S SEEDS—ALL SELECTED FOR NORTHWEST CONDITIONS

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